User Manual
Aptean Food and Beverage ERP

Process Manufacturing

Product Documentation

aptean

Contents

Release notes

Article • 11/26/2025 • 4 min read

To view what's new or changed in each release of the Aptean Process Manufacturing extension, select the specific release version.

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May 2024	2403.0.0.0	Feature release
May 2024	2402.7.0.0	Platform release
April 2024	2402.6.0.0	Stability release
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February 2024	2402.2.0.0	Stability release
January 2024	2402.1.0.0	Stability release
January 2024	2402.0.0.0	Feature release
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January 2024	2401.0.0.0	Feature release
December 2023	2303.1.0.0	Stability release

December 2023	2303.0.0.0	Feature release
December 2023	2302.2.0.0	Stability release
November 2023	2302.1.0.0	Stability release
November 2023	2302.0.0.0	Feature release
October 2023	2301.1.0.0	Stability release
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May 2023	1.24.101016.0	Stability release
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April 2023	1.21.93890.0	Stability release
April 2023	1.20.93099.0	Feature release
April 2023	1.19.91534.0	Feature release

March 2023	1.18.90072.0	Stability release
March 2023	1.17.88000.0	Stability release
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January 2023	1.15.77801.0	Stability release
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October 2022	1.9.64658.0	Stability release
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September 2022	1.6.59768.0	Feature release
August 2022	1.5.56833.0	Stability release
July 2022	1.5.54945.0	Feature release
June 2022	1.4.50889.0	Stability release
March 2022	1.3.43747.0	Stability release

2519.1.0.0

Release Note • 11/26/2025 • 2 min read

Enhancements/Modifications

With this release of the Aptean Process Manufacturing extension,

- You can exclude dedicated bins from consideration when creating inventory movements during consolidated consumption processing. For more information, see Set up process manufacturing. This enhancement addresses the issue reported in bug ID #326910.
- The translation file for the Swedish (sv-SE) language has been updated with standard texts for better readability.
- Updates have been made to ensure interoperability with the recent changes in the Aptean Beverage Alcohol Balance extension, Drink-IT Edition. To know more, see What's new in Beverage Alcohol Balance, version 2504.1.0.0.

UI/UX changes

The **Exclude Dedicated Bins from Cons. Inv. Mov.** toggle has been added to the **Process Manufacturing Setup** page.

Resolved issues

The following issues have been resolved in this release.

ID	Description
338548	The system fails to restrict the use of the **Roll Up Batch Size** action for a certified BOM on the relevant **Production BOM** page.
333358	The system incorrectly generates item tracking line on the **Consumption Journal** page when lines are created using the **Calculate Consolidated Consumption** report for items with the **SSCC (License Plate Number)** toggle turned on. The system also fails to calculate or split item tracking quantities correctly, resulting in inaccurate license plate tracking entries and incorrect reservation behavior on the **Released Production Order** page.
331667	An error occurs when reversing output quantities on the **Output** or **Production Journal** pages, as posting a negative output for a production order with backflushed component items and routing links fails to populate the lot number in the item tracking lines, resulting in a lot assignment prompt that did not occur in earlier versions.

326910	The system incorrectly updates the **Bin Code** field value on the **Inventory Movement** page when the **Use Put-away Unit of Measure** toggle on the **Create Consolidated Production Movements** page is turned on.
321793	The system fails to pick complete quantities from the bin during internal movements, even when the **Use Put-away Unit of Measure** toggle on the **Create Consolidated Production Movements** page is turned on.

2519.0.0.0

Release Note • 10/22/2025 • 3 min read

Features

With the features added in this release of the Aptean Process Manufacturing extension,

- You can configure the **Batch Sizing Method** field on the **Process Manufacturing Setup** page to define how batch sizes are determined on production BOMs. For more information, see Set up process manufacturing.
- The system updates the **Batch Size Calculation** field options on the **Production BOM** page based on the **Batch Sizing Method** field option selected on the **Process Manufacturing Setup** page. For more information, see Set up production BOM with batch size.
- You can view the calculated value of the total quantity of batch-managed components entered versus the defined batch size on the **Component Batch Calculator** FactBox of the **Production BOM** page, allowing for quick verification and improved accuracy in formula entry. For more information, see Component batch calculator.
- You can edit the **Quantity Per** field in the component lines on the **Production BOM** page when the **Batch Size Calculation** field value is set to *Batch Size Entry*. This feature gives you greater flexibility and precision when managing batch formulas, ensuring that manual adjustments stay synchronized with the automatic batch calculations of the system. For more information, see Set up production BOM with batch size.
- The system automatically selects the **Batch Size** checkbox on all component lines when the batch size entry method is utilized in the production BOM. For more information, see Set up production BOM with batch size.
- The system automatically recalculates component line quantities based on the updated batch size values in the production BOM. For more information, see Set up production BOM with batch size.
- You can execute the **Roll Up Batch Size** action to automatically update the batch size field values on the **Batch Size** FastTab of the production BOM based on the sum of all batch-controlled component line inputs. For more information, see Set up production BOM with batch size.

UI/UX changes

The following UI/UX changes have been made in this release.

- The **Re-Calculate Batch Lines** and **Roll Up Batch Size** actions have been added to the **Production BOM** page.
- The **Component Batch Calculator** FactBox has been added to the **Production BOM** page.
- The **Batch Sizing Method** field has been added to the **Batching** FastTab of the **Process Manufacturing Setup** page.

- The *None* and *Batch Size Entry* options have been added to the **Batch Size Calculation** field on the **Production BOM** page.
- The **Quantity Per** field on the **Production BOM** page has been made editable.

2518.1.0.0

Release Note • 10/22/2025 • 1 min read

Resolved issues

The following issue has been resolved in this release.

ID	Description
327750	The system incorrectly assigns the **Bin Code** field value on the**Prod. Order Components** page when the **Bin Suffix Consolidate Consumption** field value is selected on the **Shop Calendar Working Days** page.

2518.0.0.0

Release Note • 10/22/2025 • 1 min read

Enhancements/Modifications

With this release of the Aptean Process Manufacturing extension, the *OnBeforeOpenProdSplitWorksheetPage* integration event has been added to the *ProductionSplitFunctions16FDW* codeunit to enable subscription each time the **Production Split Worksheet** action is executed on the **Released Production Order** page.

Resolved issues

The following issues have been resolved in this release.

ID	Description
299176	The system fails to update the **Bin Code** field value in the production order component line on the **Released Production Order** page based on the **To-Production Bin Code** field value defined for the work center, even when the substitute item does not have an open bin relation configured.
308051	The system incorrectly uses the production order routing starting time instead of the work center starting time defined on the routing line when refreshing a released production order. This issue occurs when the **Prod. Order Zero Run Time** toggle is turned on for the work center associated with that routing line.

2517.1.0.0

Release Note • 9/24/2025 • 2 min read

Enhancements/Modifications

With this release of the Aptean Process Manufacturing extension, the system retains the correct suffix for the bin on the component lines when you reopen a finished production order, ensuring accurate bin tracking.

Resolved issues

The following issues have been resolved in this release.

ID	Description
317329	An error occurs when executing the **Refresh Production Order** action on the **Released Production Order** page for a production BOM with an uncertified version. This issue arises when the **Enable Automatic Optimization** toggle on the **Process Manufacturing Setup** page is turned on.
297268	The system fails to consider the **Wait Time** field value when updating the **Ending Date-Time** field value on the **Prod. Order Routing** page during batch optimization. This issue occurs when the **Use Batch Run Time** checkbox is selected for the relevant production order routing lines.
317789	An error occurs when changing the status of a production order to *Finished*, even though the **License Plate No.** field value is defined on the related **Item Tracking Lines** page, the location is non-license plate tracked, and the consumption item has the license plate-tracked item tracking code.

Integrations

The Aptean Process Manufacturing extension has been integrated with the Aptean Essentials extension. For more information, see Integrations.

2517.0.0.0

Release Note • 9/24/2025 • 1 min read

Enhancements/Modifications

With this release of the Aptean Process Manufacturing extension, you can split production orders even after production has started. The system allows you to split the remaining quantities while ensuring that finished quantities remain intact, providing flexibility in rescheduling and managing production. This enhancement addresses the issue reported in the bug ID #313070.

Resolved issues

The following issue has been resolved in this release.

ID	Description
313070	An error occurs when a production order that has already been split using the line-based method is split again using the order-based method. In this case, a new production order is created unexpectedly, and the header quantity of the original production order is updated incorrectly.

2516.0.0.0

Release Note • 8/27/2025 • 1 min read

Enhancements/Modifications

This extension has been updated to ensure interoperability with the recent changes in the Aptean eSignature extension. For more information, see What's new in eSignature, version 2501.0.0.0.

Integrations

The Aptean Process Manufacturing extension has been integrated with the Aptean eSignature extension. For more information, see Integrations.

2515.1.0.0

Release Note • 8/27/2025 • 2 min read

Enhancements/Modifications

With the release of the Aptean Process Manufacturing extension, the references of the *NoSeriesManagement* codeunit have been removed from the *ProcessManufacturingSetupFDW* table, to ensure compatibility with Business Central, version 27.

Resolved issues

The following issues have been resolved in this release.

ID	Description
311188	The system incorrectly updates the **Bin Code** field value on the **Prod. Order Components** page when changing the production order routing, ignoring the configuration on the **Open Shop Floor Bin Relations** page. This issue occurs even when the **Use Open Shop Floor Bin** toggle on the relevant **Item Card** page is turned on.
305790	The system incorrectly deletes all records on the **Consumption Reallocation Item** page instead of removing only the relevant record when a production order line for a co-product is deleted.
296162	The system incorrectly calculates and updates values in the batch-related fields on the production order line during batch optimization. This issue occurs when the **Batch Size Calculation** field value is set to *On Phantom* and a production BOM is configured in the line of the relevant **Production BOM** page.
315555	An error occurs on the **Released Production Order** page when selecting the **OK** button on the **Calculate Consolidated Consumption** page with the **Print Report** toggle turned on. This issue arises when the system fails to recognize the posted output for the partially finished production orders.
309069	The system incorrectly generates empty movement lines on the **Movement Worksheets** page when creating a warehouse movement by turning on the **Create Inventory/Warehouse Movement** toggle on the **Create Consolidated Production Movement** page. This issue occurs when the required quantity is less than the available inventory.

2515.0.0.0

Release Note • 8/27/2025 • 1 min read

Features

With the feature added in this release of the Aptean Process Manufacturing extension, you can manage unplanned output by controlling the application of consumption reallocation. For more information, see Unplanned output and consumption.

UI/UX changes

The following UI/UX changes have been made in this release.

- The **Exclude from Consumption Reallocation** checkbox has been added to the **Unplanned Output Setup** page.
- The **Exclude from Consumption Reallocation** toggle has been added to the **Add Unplanned Output** page.

2514.1.0.0

Release Note • 8/5/2025 • 1 min read

Enhancements/Modifications

With this release of the Aptean Process Manufacturing extension,

- You can configure and manage product yield percentage more efficiently on the **Production BOM Version** page. To know more, Production BOM cost shares setup.
- The *GetProductionScenarioCode* local procedure has been added to the *CoProduct16FDW* codeunit with improved production scenario lookup logic that implements proper filtering based on the **Item No.**, **Production BOM No.**, **Routing No.**, **Location Code**, and **Status** field values. This allows the system to provide more robust validation during co-product processing by ensuring only certified production scenarios are selected based on the specific item and location context.

UI/UX changes

- The **Product Yield %** field has been added to the **Lines** FastTab of the **Production BOM Version** page.

> **Note**
>
> This field is visible only via personalization.

Resolved issues

The following issue has been resolved in this release.

ID	Description
317075, 317301	The system fails to upgrade the Aptean Process Manufacturing extension from version 2511.0.0.0 to 2514.0.0.0 due to compatibility issues, preventing successful deployment.

2514.0.0.0

Release Note • 7/30/2025 • 1 min read

Features

With the feature added in this release of the Aptean Process Manufacturing extension, some fields have been added to the **Item Template** page.

UI/UX changes

The following fields have been added to the **Item Template** page:

- Use Open Shop Floor Bin
- Component Pick Method
- Consolidate Consumption
- Default Weight Calculation Type

2513.0.0.0

Release Note • 7/30/2025 • 1 min read

Features

With the feature added in this release of the Aptean Process Manufacturing extension, you can select whether the **Scrap %** field value should be included in production calculations by configuring the **Scrap Inclusion Mode** field value on the **Production BOM** page.

Enhancements/Modifications

With this release of the Aptean Process Manufacturing extension, the calculation of the **Quantity per** field value on the **Production BOM** page has been updated. This enhancement addresses the issue reported in bug ID #299528 .

UI/UX changes

The following UI/UX changes have been made in this release.

- The **Default Scrap Inclusion Mode** field has been added to the **Process Manufacturing Setup** page.
- The **Scrap Inclusion Mode** field has been added to the **Production BOM** page.

Resolved issues

The following issue has been resolved in this release.

ID	Description
299528	The system incorrectly updates the **Expected Quantity** field value on the **Prod. Order Components** page when the **Scrap %** field value is greater than 0. This issue occurs when the scrap value is calculated twice on the **Production BOM** page.

2512.0.0.0

Release Note • 7/30/2025 • 1 min read

Features

With the feature added in this release of the Aptean Process Manufacturing extension, you can configure and manage product yield percentage more efficiently on the **Production BOM** page.

UI/UX changes

The following UI/UX changes have been made in this release.

- The **Minimum Product Yield** % field has been added to the **Process Manufacturing Setup** page.
- The **Product Yield** % field has been added to the **Lines** FastTab of the **Production BOM** page.

> Note

> This field is visible only via personalization.

2511.1.0.0

Release Note • 7/30/2025 • 1 min read

Enhancements/Modifications

This extension has been updated to ensure interoperability with the recent changes in the Aptean Inspection Status extension. To know more, see What's new in Inspection Status, version 2503.3.0.0.

Resolved issues

The following issues have been resolved in this release.

ID	Description
298488	An error occurs when executing the **Change Production Scenario** or the **Optimize Batch Size** action on the **Firm Planned Prod. Order** page. This issue arises when the firm planned production order is created via the **Planning Worksheet** page.
308197	A performance issue occurs when running the **Create Consolidated Production Movement** report associated with the **Bin Code** field values during warehouse movement creation.

2511.0.0.0

Release Note • 7/2/2025 • 1 min read

Features

With the features added in this release of the Aptean Process Manufacturing extension,

- You can change the production scenario on production orders where only the routing number differs, and the system updates only the routing lines, and retains the production BOM and component lines to avoid unnecessary recalculations.
- The system automatically applies the correct production scenario based on item, location, and variant code during production order creation, refresh, replanning, planning worksheet processing, batch optimization, production split worksheet, and changing production scenario. For more information, see Production Split Worksheet.

> **Note**
>
> These features are available only when the Aptean Production Scenarios extension is installed.

Enhancements/Modifications

This extension has been updated to ensure interoperability with the recent changes in the Aptean Production Scenarios extension. To know more, see What's new in Production Scenarios, version 2505.0.0.0.

Resolved issues

The following issue has been resolved in this release.

ID	Description
299696	The system fails to update the **Production BOM No.** and **Routing No.** field values when modifying the **Production Scenario Code** field value on the **Split Plan** FastTab of the **Production Split Worksheet** page.

2510.2.0.0

Release Note • 7/2/2025 • 1 min read

Resolved issues

The following issues have been resolved in this release.

ID	Description
299577	An error occurs on the **Create Consolidated Production Movements** page when entering more than 20 characters in the **Bin Code** field.
296147	A performance issue occurs when selecting **OK** on the **Create Consolidated Production Movement** page, delaying inventory movements. This issue occurs only when the Aptean Inspection Status extension is installed.

2510.1.0.0

Release Note • 7/2/2025 • 1 min read

Enhancements/Modifications

With this release of the Aptean Process Manufacturing extension,

- You can create a production movement using the **Use Put-away Unit of Measure Code** toggle on the **Create Consolidate Production Movement** page. For more information, see Consolidated Pick and Consolidated Consumption.

- The system automatically assigns the lot number and updates the **To Bin Code** and **Quantity** field values on the **Internal Movement** page based on the assigned lot number when a consolidated production movement is created and when the **Pick According to FEFO** toggle on the **Location Card** page is turned on.

2510.0.0.0

Release Note • 7/2/2025 • 1 min read

Features

With the feature added in this release of the Aptean Process Manufacturing extension, you can calculate consolidated consumption using expected output, allowing you to post the consumption even before the output is posted. This helps streamline warehouse operations and supports timely posting in fast-paced production environments. For more information, see Consolidated consumption.

UI/UX changes

The **Calc. Based On** field has been added to the **Calculate Consolidated Consumption** page.

2509.1.0.0

Release Note • 5/21/2025 • 1 min read

Resolved issues

The following issues have been resolved in this release.

ID	Description
287452	The system incorrectly updates the **Quantity per (WU)**, **Input Quantity per (WU)**, and **Output Quantity per (WU)** field values on the lines of the **Production BOM** page. This issue occurs even when the relevant **Item Units of Measure** page does not include the unit of measure specified in the **Weight Unit (WU)** field on the **Production BOM** page.
282341	The system incorrectly allows adding the **Yield %** field, which was previously made obsolete, to the lines of the **Production BOM** page through personalization.

UI/UX changes

The **Yield %** field has been removed from the **Production BOM** page.

2509.0.0.0

Release Note • 5/21/2025 • 2 min read

Features

With the feature added in this release of the Aptean Process Manufacturing extension, the system excludes bins that belong to the same zone as the bin selected in the **To Bin Code** field value on the **Prod. Order Components** page. This ensures that inventory is consolidated only from bins located in different zones. For more information, see Consolidated Pick and Consolidated Consumption.

Enhancements/Modifications

With this release of the Aptean Process Manufacturing extension, you can create internal inventory movements on the **Create Consolidated Production Movement** page, which are based on the **Available Qty. to Take** field values on the **Bin Contents** page. For more information, see Consolidated Pick and Consolidated Consumption.

UI/UX changes

The **Use Different Zone** toggle has been added on the **Create Consolidated Production Movement** page.

Resolved issues

The following issues have been fixed in this release.

ID	Description
263528	The system incorrectly displays all available values in the **Bin Code** field, instead of filtering them based on the selected value in the **Location Code** field on the **Filter: Prod. Order Component** FastTab of the **Create Consolidated Production Movement** page.
286494	An error occurs upon executing the **Create Consolidated Production Movement** action on the **Internal Movement** page.

2508.1.0.0

Release Note • 5/7/2025 • 2 min read

Features

With the feature added in this release of the Aptean Process Manufacturing extension, you can define how the system should handle rounding for consolidated consumption quantities. This configuration determines how the quantity is calculated and recorded in the consumption journal and displayed in the printed report. For more information, see Calculate Consolidated Consumption. This feature addresses the issue reported in bug #272020.

UI/UX changes

The following UI/UX changes have been made in this release.

- The **Rounding Source** and **Rounding Precision** fields have been added to the **Calculate Consolidated Consumption** page.
- The **Create Test Report** toggle has been renamed to **Print Report** on the **Calculate Consolidated Consumption** page.

Resolved issues

The following issues have been fixed in this release.

ID	Description
286564	The system ignores the quantity of a bin when the associated bin code is used in the **To Bin Code** field value on the **Bin Contents** page, leading to incorrect inventory movement suggestions. This issue occurs when the **Dedicated** checkbox is selected for the related **To Bin Code** field and the **Ignore Contents of To Bin** toggle on the related **Create Consolidated Production Movement** page is turned off.
277596	The system fails to update the **Quantity** field value on the **General** FastTab of the **Released Production Order** page when the value in the **Quantity** field is increased on the **Split Plan** FastTab of the **Production Split Worksheet** page.
272020	The system uses the rounding precision value from the **Item Card** page to round off the consolidated consumption quantity in the **Calculate Consolidated Consumption** report.

2508.0.0.0

Release Note • 4/23/2025 • 2 min read

Features

With the features added in this release of the Aptean Process Manufacturing extension,

- You can execute the **Co-Product Routing** action to fill the route for co-products. When the production order is refreshed, the **Routing No.** field value is updated on the **Released Production Order** page.
- The **Co-Products Routing** FactBox suggests the possible routes available for the selected co-product line on the **Production BOM, Production BOM Version**, and **Item Production Scenarios** pages.
  For more information, see Co-product routing.

> **Note**
>
> This functionality works only when the Aptean Production Scenarios extension is installed.

Enhancements/Modifications

With this release of the Aptean Process Manufacturing extension, the system updates the **Routing No.** field value upon executing

- The **Refresh Production Order** action on the **Release Production Order** page.
- The **Change Production Scenario** action for the selected production orders on the **Release Production Order** page.

> **Note**
>
> - If there is no matching route, the system checks the **Routing No.** field value associated with the **Co-product** field value on the **Item Card** page.
> - If the **Routing No.** field value associated with the co-product is blank on the **Item Card** page, it will also be blank on the production order line of the **Release Production Order** page.
>   This functionality works only when the Aptean Production Scenarios extension is installed.

UI/UX changes

The following UI/UX changes have been made in this release.

- The **Co-Product Routing** action has been added to the **Item Production Scenarios** page associated with the **Item Card** page.
- The **Co-Products Routing** FactBox has been added to the **Production BOM**, **Production BOM Version**, and **Production Scenarios** pages.

Resolved issues

The following issues have been fixed in this release.

ID	Description
285155	The system incorrectly deletes all the production order lines except the first line in the first released production order after executing the **Change Production Scenario** action on the selected released production order.
282268	An error occurs upon executing the **Change Production Scenario** action on the **Shop Floor Production** page when attempting to change a production order with co-product to without co-product.

2507.0.0.0

Release Note • 4/23/2025 • 1 min read

Features

With the features added in this release of the Aptean Process Manufacturing extension, you can apply several filters on the **Create Inventory Movement** page. For more information, see Consolidated Pick and Consolidated Consumption.

Enhancements/Modifications

With this release of the Aptean Process Manufacturing extension, the system retains the **Quantity** field value on the **Internal Movement** page when you select a value for the **From Bin Code** field, even if the **From Bin Code** was initially left blank and the quantity was entered first.

UI/UX changes

The following fields have been added to the **Create Inventory Movement** page.

- To Bin Code
- Due Date
- Unit of Measure Code

2506.2.0.0

Release Note • 4/15/2025 • 1 min read

Resolved issues

The following issue has been resolved in this release.

ID	Description
285192	An error occurs when attempting to post consumption in the Aptean Mobile Warehouse app. This issue arises when the **Consolidated Consumption** toggle on the **Item Card** page is turned on.

2506.1.0.0

Release Note • 4/9/2025 • 1 min read

Enhancements/Modifications

With this release of the Aptean Process Manufacturing extension, the following enhancements have been made.

- The *OnBeforeCheckProcessWeightChangePercentage16FDW* event has been added to the *ProductionBOMLineExt16FDW* table to support custom handling of weight change percentage processing.
- The system retains the last selected options and filters when executing the **Explode Routing – Multi** report page. It automatically applies these values by default.

Resolved issues

The following issues have been resolved in this release.

ID	Description
269633	The system fails to display all routing lines on the **Output Journals** page associated with the individual lines within the family production order. This issue occurs when executing the **Explode Routing - Multi** report page.
272056	The system fails to update the output batch field values when the **Process Weight Change** % field value is modified in the production BOM line.

2506.0.0.0

Release Note • 4/9/2025 • 1 min read

Features

With the feature added in this release of the Aptean Process Manufacturing extension, the add unplanned output functionality has been enhanced for accurate item reallocation and consumption when processing production orders with the main BOM containing a phantom BOM. To know more about the addition of unplanned output, see Unplanned output in the production process.

2505.1.0.0

Release Note • 3/26/2025 • 2 min read

Enhancements/Modifications

With this release of the Aptean Process Manufacturing extension,

- Enhanced rounding calculations improve the precision of the **Output Quantity Per Batch** and **Output Quantity Per Batch (WU)** fields. For more information, see Weight and Yield Percentage.
- You can view a notification on the **Create Consolidated Production Movement** page if the Aptean Warehouse Management System extension is installed and the tooltip for the **Create Inventory/Warehouse Movement** toggle is updated to enhance readability. This enhancement addresses the issue reported in bug ID #275558. To know more, see Consolidated Pick and Consolidated Consumptions.

Resolved issues

The following issues have been resolved in this release.

ID	Description
269043	An error occurs when changing the **Unit of Measure Code** field value on the **Production BOM** page if the item has multiple units of measure and a **Weight Unit** field value is defined on the **Process Manufacturing Setup** page. This issue causes the **Quantity Per (WU)** field to display incorrect values on the **Production BOM** page.
267735	The system displays incorrect decimal values in the **Output Quantity per Batch** and **Output Quantity per Batch (WU)** fields on the **Production BOM** page.
275558	The system fails to retain the value of the **Create Inventory/Warehouse Movement** toggle, even when the **Use default values from** field value is set to *Last used options and filters* on the **Create Consolidated Production Movement** page. This issue occurs when the **Create Consolidated Production Movement** page is reopened, and the Aptean Warehouse Management System extension is not installed.

2505.0.0.0

Release Note • 2/28/2025 • 1 min read

Features

With this release of the Aptean Process Manufacturing extension, phantom BOM handling has been enhanced for accurate item reallocation and consumption when a phantom BOM is used in the production of (semi) finished items. The system ensures correct BOM interpretation, validates reallocation consumption items, supports seamless production order refresh, and prevents errors when a phantom BOM is included in the main BOM. For more information, see Co-products.

2504.0.0.0

Release Note • 2/25/2025 • 1 min read

Features

With this release of the Aptean Process Manufacturing extension,

- You can configure the BOM for unplanned output items on the **Unplanned Output Setup** page, enabling the application of different BOMs for reallocation items in production orders.
- The system automatically applies the correct active BOM version when unplanned output items are added to a released production order.
- The system displays variant descriptions dynamically in unplanned item descriptions when variants are used.
- The system ensures that, during output registration in the shop floor production, the item displays the relevant unplanned output description, including the variant code description if a variant is used as defined on the **Unplanned Output Setup** page.

For more information, see BOM for unplanned output.

UI/UX changes

The **BOM for Unplanned Output** field has been added to the **Unplanned Output Setup** and **Add Unplanned Output** pages.

2503.1.0.0

Release Note • 2/19/2025 • 1 min read

Enhancements/Modifications

With this release of the Aptean Process Manufacturing extension, the system triggers batch optimization functionality upon selecting the **Replan** action on the **Released Production Order** page. This enhancement ensures the accurate population of lines for the following fields on the **Released Production Order** page.

- Quantity
- No. of Batches
- No. of Batches Rounded
- Quantity per Batch
- Quantity in No. of Batches Rounded
- Total Input Quantity per Batch (WU)
- Total Output Quantity per Batch (WU)

2503.0.0.0

Release Note • 2/12/2025 • 1 min read

Enhancements/Modifications

This extension has been updated to ensure interoperability with the recent changes in the Aptean Beverage Advanced Warehouse Management extension, Drink-IT Edition. For more information, see What's new in Advanced Warehouse Management, version 2504.0.0.0.

UI/UX changes

The **Enable Production Apportionment Costing for Co-Products** toggle has been added to the **Process Manufacturing Setup** page.

> **Note**
>
> This toggle is visible only when the Aptean Production Cost Apportionment extension is installed.

2502.3.0.0

Release Note • 2/12/2025 • 2 min read

Enhancements/Modifications

With this release of the Aptean Process Manufacturing extension:

- You can view the **Input Quantity per (WU)** and **Output Quantity per (WU)** field values even after executing the **Calculate Weight and Yield** action on the **Production BOM** page. This functionality applies to lines where the **Type** field is set to *Production BOM* and the **Batch Size** checkbox is selected.
- When you change the **Unit of Measure Code** field value on the batch size production BOM line, the system notifies you that this change will clear specific field values, requiring manual updates. If you proceed, the following field values will be cleared:
  - **Input Quantity per Batch**
  - **Input Quantity per Batch (WU)**
  - **Output Quantity per Batch**
  - **Output Quantity per Batch (WU)**

  For more information, see Set up production BOM with batch size.
- When the **Dynamic BOM Line Weight Calculations** toggle on the **Process Manufacturing Setup** page is turned on and:
  - If you modify the **Input Quantity per Batch** or **Input Quantity per Batch (WU)** field value, the **Input Quantity per (WU)** field value is reset to *0* for the batch size production BOM line.
  - If you modify the **Output Quantity per Batch** or **Output Quantity per Batch (WU)** field value, the **Output Quantity per (WU)** field value is reset to *0* for the batch size production BOM line.
  - The values for **Input Quantity per (WU)** and **Output Quantity per (WU)** are updated only after executing the **Calculate Quantity per** action on the **Production BOM** page.

  For more information, see Process weight change percentage on production BOM lines.

Resolved issues

The following issues have been resolved in this release.

ID	Description
259981	The system does not consider the filter fields on the **Prod. Order Routing Line** FastTab when selecting **OK** on the **Explode Routing – Multi** report page.

250827	The system does not consider the **Process Weight Change** % field value on the lines when calculating the values of the **Total Input Net Weight**, **Total Input Gross Weight**, **Total Output Net Weight**, and **Total Output Gross Weight** fields on the **Production BOM** page.

2502.2.0.0

Release Note • 2/11/2025 • 1 min read

Enhancements/Modifications

This extension has been updated to ensure interoperability with the recent changes in the Aptean Shop Floor Production (BC) extension. To know more, see What's new in Shop Floor Production (BC), version 2502.3.0.0.

2502.1.0.0

Release Note • 2/3/2025 • 1 min read

Enhancements/Modifications

With this release of the Aptean Process Manufacturing extension, you can view the **Consolidated Consumption** and **Component Pick Method** filters by default on the **Create Consolidated Production Movement** page, ensuring seamless access to these filters when creating relevant production movements.

UI/UX changes

The **Consolidated Consumption** and **Component Pick Method** filters have been made visible by default on the **Create Consolidated Production Movement** page.

Resolved issues

The following issue has been resolved in this release.

ID	Description
256826	The system fails to create internal and inventory movement lines for production order components when selecting **OK** on the **Create Consolidated Production Movement Filters** page. This issue occurs when the **Component Pick Method** field value exists and the **Consolidate Consumption** checkbox is selected on the **Prod. Order Components** page.

2502.0.0.0

Release Note • 2/3/2025 • 1 min read

Enhancements/Modifications

With this release of the Aptean Process Manufacturing extension, you can manage production movements, ensuring real-time data synchronization between the consolidation production movement in Business Central and the WMS scanner. For more information, see What's new in Warehouse Management System, version 2501.0.0.0.

Integrations

The Aptean Process Manufacturing extension has been integrated with the Aptean Warehouse Management System extension.

UI/UX changes

The **Release Consolidated Movement to Scanner** toggle has been added to the **Process Manufacturing Setup** page.

2501.5.0.0

Release Note • 1/29/2025 • 1 min read

Enhancements/Modifications

With this release of the Aptean Process Manufacturing extension, the production order number is updated in the **Consumption Reallocation Item** table when a production order's status is changed from *Firm Planned* to *Released*.

2501.4.0.0

Release Note • 1/27/2025 • 1 min read

Enhancements/Modifications

With this release of the Aptean Process Manufacturing extension, it is mandatory to install the Aptean Standard Measurements extension to ensure compatibility and seamless operation for businesses using the Aptean Process Manufacturing extension.

2501.3.0.0

Release Note • 1/23/2025 • 1 min read

Enhancements/Modifications

This extension has been updated to ensure interoperability with the recent changes in the Aptean Standard Measurements extension. To know more, see Highlights of Standard Measurements, version 2501.0.0.0.

2501.2.0.0

Release Note • 1/15/2025 • 1 min read

Enhancements/Modifications

With this release of the Aptean Process Manufacturing extension, the *OnAfterInsertConsumptionJournalLine* event has been added to the *ConsolidatedConsumption16FDW* codeunit.

2501.1.0.0

Release Note • 1/9/2025 • 1 min read

Resolved issues

The following issue has been resolved in this release.

ID	Description
255381	The system fails to update the **No. of Batches**, **No. of Batches Rounded**, and **Quantity per Batch** field values on the **Released Production Order** page. This issue occurs when the **Batch Optimization** field on the **Optimize Method** FastTab is set to *Manual*, and the **Number of Batches** and **Batch Size** field values exist on the **Parameters** FastTab of the **Optimize Batch Size** page.

2501.0.0.0

Release Note • 1/7/2025 • 1 min read

Enhancements/Modifications

With this release of the Aptean Process Manufacturing extension, you can view the detailed warehouse entries for co-products and process the unplanned output item with the advanced warehouse management license plates. For more information, see What's new in Beverage Advanced Warehouse Management, version 2501.0.0.0.

UI/UX changes

The **Default License Plate No. Reallocation Item** field has been added to the **General** FastTab of the **Process Manufacturing Setup** page.

> **Note**
>
> This field is visible only when the *Aptean Beverage Advanced Warehouse Management for Drink-IT Edition* application name is enabled on the **Feature Control** page.

2413.0.0.0

Release Note • 12/30/2024 • 1 min read

Features

With this release of the Aptean Process Manufacturing extension, you can configure the **Open Shop Floor Bin Relations** page to update the bin codes for components in the planning worksheet lines. For more information, see Open shop floor bin relations.

2412.6.0.0

Release Note • 12/26/2024 • 1 min read

Resolved issues

The following issue has been resolved in this release.

ID	Description
241357	The system incorrectly updates the **Cost Apportion Ratio** field to *0* on the **Released Production Order** page after posting the output. This issue occurs even when the **Consumption Pick Method** is set to *Consolidated* and the **Consolidated Consumption** toggle is turned on for the component item on the associated **Item Card** page.

2412.5.0.0

Release Note • 12/26/2024 • 1 min read

Enhancements/Modifications

With this release of the Aptean Process Manufacturing extension, when executing the **Copy BOM** action on the **Production BOM** page, the system updates the **Batch Size Calculation** field of the current BOM with the value from the newly selected BOM. The system no longer triggers an error, even if the values in both BOMs differ. This enhancement addresses the issue reported in bug ID #247640.

Resolved issues

The following issues have been resolved in this release.

ID	Description
253004	The system fails to update the **Process Weight Change** % field value when modifying the **Output Quantity per (WU)** field value in the production BOM line. This issue occurs when the **Dynamic BOM Line Weight Calculations** toggle on the **Process Manufacturing Setup** page is turned on.
255794	The system incorrectly updates the **Quantity per** field value in the production BOM line when executing the **Calculate Quantity per** action on the **Production BOM** page. This issue occurs when the **Batch Size Calculation** field value is set to *On Phantom*.

2412.4.0.0

Release Note • 12/18/2024 • 1 min read

Enhancements/Modifications

With this release of the Aptean Process Manufacturing extension, the formula for converting the value from the **Yield** % field to the **Process Weight Change** % field on the production BOM line has been corrected. The updated formula is:

Process Weight Change % = Yield % - 100

This enhancement ensures that the **Process Weight Change** % field value is represented as a negative value, addressing the issue reported in bug #255792.

2412.3.0.0

Release Note • 12/13/2024 • 1 min read

Resolved issues

The following issue has been resolved in this release.

ID	Description
254793	The system fails to upgrade to 2412.1.0.0 due to an error that occurred while updating the production BOM version lines.

2412.2.0.0

Release Note • 12/11/2024 • 1 min read

Enhancements/Modifications

With this release of the Aptean Process Manufacturing extension, the *Consumption Variant Code* column has been added to the **Calculate Consolidated Consumption** report. This enhancement allows lines to be grouped by the combination of item and variant code. If no lines include a variant code, the column will be automatically hidden in the report. This enhancement addresses the issue reported in bug ID #238977.

2412.1.0.0

Release Note • 12/10/2024 • 1 min read

Enhancements/Modifications

With this release of the Aptean Process Manufacturing extension, when an unplanned output item is added to the released production order line, the system automatically updates the **Lot Production Date** field with the current work date. This occurs when the **Lot Production Date** field value is part of the lot number (when the Aptean Lot Management extension is installed) or the expiration date field values (when the Aptean Expiration Management extension is installed). This enhancement addresses the issue reported in bug ID #240032.

Resolved issues

The following issues have been resolved in this release.

ID	Description
251256	The system incorrectly displays two fields with the caption, **Component Pick Method**, on the **Item Card** page.
232853	The system incorrectly suggests to take inventory from the production bin used on the previous day when creating an inventory movement using the create consolidated production movement functionality, instead of taking the full quantity from the warehouse bins.

2412.0.0.0

Release Note • 12/9/2024 • 2 min read

Features

With this release of the Aptean Process Manufacturing extension, you can:

- Automatically calculate input and output weights on the production BOM lines.
- Manually edit output quantities on the production BOM lines.
- Determine how the system rounds the **Quantity per** field value on the production BOM lines.

For more information, see Set up process manufacturing.

- Manage weight changes in manufacturing processes with the **Process Weight Change** % field, which replaces the **Yield** % field for more precise tracking of weight variations. For more information, see Process weight change percentage on production BOM lines.
- Streamline production planning by splitting production orders or lines more efficiently using flexible options to update routing setup times during the split process. For more information, see Production split worksheet.
- View the quantity in the weight unit on the production BOM line based on the weight unit configured in the **Weight Unit (WU)** field on the **Process Manufacturing Setup** page.

UI/UX changes

The following UI/UX changes have been made in this release.

- The **Quantity per WU** and **Process Weight Change** % fields have been added to the line of the **Production BOM** page.
- The **Dynamic BOM Line Weight Calculations**, **Allow Direct Edit of BOM Line Output Quantity** toggles, and **Rounding Method for Quantity per Calculation** field have been added to the **Process Manufacturing Setup** page.
- The **Copy Setup Time on Split to** field has been added to the **Calculate Split Plan** page.
- The **Yield** % field has been removed from the line of the **Production BOM** page.

2411.0.0.0

Release Note • 12/9/2024 • 1 min read

Enhancements/Modifications

This extension has been updated to ensure interoperability with the recent changes in the Aptean Shop Floor Production (BC) extension. To know more, see What's new in Shop Floor Production (BC), version 2408.0.0.0.

2410.2.0.0

Release Note • 12/5/2024 • 1 min read

Resolved issues

The following issue has been resolved in this release.

ID	Description
246358	The system fails to create internal movement lines when the entire quantity is in demand and exceeds the available supply from the relevant bin. This issue occurs when the **Include Lines for Shortages** toggle on the **Create Consolidated Production Movement** page is turned on.

2410.1.0.0

Release Note • 12/2/2024 • 1 min read

Resolved issues

The following issue has been resolved in this release.

ID	Description
248166	An error occurs when adding an alternate consumption quantity for an unplanned consumption item via the **Add Unplanned Consumption** action on the **Prod. Order Components** page. This issue occurs when the **Quantity Rounding Precision** field has a defined value on the **Item Units of Measure** page associated with the item.

2410.0.0.0

Release Note • 11/29/2024 • 1 min read

Enhancements/Modifications

With this release of the Aptean Process Manufacturing extension, the system ensures accurate inventory tracking and flexibility for handling partial quantities, enabling efficient item movement between bins using advanced warehouse management license plates. You can manage backflush processes and co-products while using advanced warehouse management license plates to streamline inventory movements and consumption tracking. To know more, see What's new in Advanced Warehouse Management, version 2407.0.0.0.

Integrations

The Aptean Process Manufacturing extension has been integrated with the Aptean Beverage Advanced Warehouse Management extension, Drink-IT Edition.

2409.9.0.0

Release Note • 11/29/2024 • 1 min read

Resolved issues

The following issue has been resolved in this release.

ID	Description
243338	The system fails to display the **Qty. Per** and **Expected Qty.** field values for the machine center on the **Production Completion Analysis** report.

2409.8.0.0

Release Note • 11/26/2024 • 1 min read

Enhancements/Modifications

With this release of the Aptean Process Manufacturing extension, the *OnAfterGetTotalInputQuantityPerBatchUoMFDW* and *OnAfterGetTotalOutputQtyPerBatchUoMFDW* integration events have been added to the *ProductionBOMHeaderExt16FDW* and *ProductionBOMVersionExt16FDW* tables. This enhancement addresses the issue reported in bug ID #247871.

2409.7.0.0

Release Note • 11/18/2024 • 1 min read

Resolved issues

The following issue has been resolved in this release.

ID	Description
246729	An error occurs during the installation or upgrade of the Aptean Process Manufacturing extension if the work center field is blank in any production order routing line.

2409.6.0.0

Release Note • 11/14/2024 • 1 min read

Resolved issues

The following issue has been resolved in this release.

ID	Description
238359	When a firm planned production order is converted to a released production order, the system does not retain the bin code specified on the **Firm Planned Prod. Order** page.

2409.5.0.0

Release Note • 11/8/2024 • 1 min read

Resolved issues

The following issue has been resolved in this release.

ID	Description
236797, 242734	The system displays an incorrect value in the **Actual Quantity** field on the **Material and Capacity Cost Details** page because it uses the item unit of measure instead of the base unit of measure.

2409.4.0.0

Release Note • 10/17/2024 • 1 min read

Resolved issues

The following issue has been resolved in this release.

ID	Description
229501	The system incorrectly updates the value in the **Quantity per** field on the **Production BOM** page for the phantom BOM. This issue occurs when the **Batch Size Calculation** field is set to *On Phantom*.

2409.3.0.0

Release Note • 10/10/2024 • 1 min read

Enhancements/Modifications

With this release of the Aptean Process Manufacturing extension, the *OnTransferBOMOnAfterProdBOMLineSetFilters* event has been added to the *PlanningLineMgtSubscr16FDW* codeunit. This update ensures that co-product items are not added to the production order lines along with the component items after refreshing the production order or executing the **Calculate Regenerative Plan** action on the **Planning Worksheet** page.

> **Note**
>
> This enhancement has been made in line with the upgrade to Business Central, version 25.1

2409.2.0.0

Release Note • 9/30/2024 • 1 min read

Resolved issues

The following issue has been resolved in this release.

ID	Description
236168	An error occurs on the **Change Production Scenario** page when changing to a production scenario associated with a BOM, where the **Batch Size Calculation** field is set to *None* on the **Production BOM** page. This issue occurs when the following toggles on the **Process Manufacturing Setup** page are turned on: • **Enable Automatic Optimization** (Released production orders) • **Enable Optimization in Planning** (Planning worksheets)

2409.1.0.0

Release Note • 9/27/2024 • 1 min read

Enhancements/Modifications

This extension has been updated to ensure interoperability with the recent changes in the Aptean Mobile Warehouse Registration extension. To know more, see What's new in the Aptean Mobile Warehouse app, version 1.29.186403.0.

2409.0.0.0

Release Note • 9/26/2024 • 1 min read

Enhancements/Modifications

With this release of the Aptean Process Manufacturing extension, the check for co-products within a production order line has been enhanced and extended to other extensions, to improve flexibility in handling co-products. This enhancement has been implemented in correlation with the changes made to the Aptean Production Cost Apportionment extension. For more information, see What's new in Aptean Production Cost Apportionment, version 2402.0.0.0.

2408.0.0.0

Release Note • 9/20/2024 • 1 min read

Features

With this release of the Aptean Process Manufacturing extension, you can:

- Perform automatic batch size optimization for production orders and planning worksheets. For more information, see Automatic optimization for batch size.
- Perform batch size optimization for production orders with multiple lines. For more information, see Batch size in production order and component lines.
- Perform batch size optimization while changing the production scenario in production orders. For more information, see Integration of production scenarios.
- Configure the production scenario to determine its use for both automatic batch size optimization and run time. For more information, see Integration with production scenarios.

UI/UX changes

The **Automatic Opt. Error Handling** field, **Enable Automatic Optimization**, and **Enable Optimization in Planning** toggles have been added to the **Process Manufacturing Setup** page.

2407.2.0.0

Release Note • 9/10/2024 • 2 min read

Enhancements/Modifications

With this release of the Aptean Process Manufacturing extension, modifications have been made to accommodate the following changes:

- Enhanced application interaction: Procedures have been added to enhance the application interaction, improve upgrade tag management, streamline upgrade and installation processes, and provide additional flexibility by managing upgrades on a per-company and per-database basis.
- Application area refresh: Updates have been implemented to improve the application area refresh process by integrating a new procedure into the *Enable* codeunit.
- Improved management of install and upgrade code: The *Install* and *Upgrade* codeunits have been updated to streamline the handling of installation, reinstallation, and upgrade processes, ensuring smoother transitions and minimizing disruptions during these operations.
- Centralized license management procedures: The existing license management codeunit has been modified to use centralized license management procedures, further reducing the need for application-specific adjustments.
- Enhancements have been made to update the process within the application to handle the *User Group* and *User Group Permission Set* tables. This change ensures compatibility with current and future versions of Business Central, even when the *User Group* and *User Group Permission Set* tables are deprecated.

> **Note**
>
> The *User Group* and *User Group Permission Set* tables are deprecated in Business Central, version 25.

2407.1.0.0

Release Note • 9/4/2024 • 1 min read

Enhancements/Modifications

With this release of the Aptean Process Manufacturing extension, the **Calculate Consolidated Consumption** page displays a confirmation message if any selected released production orders do not have posted output. You can choose to exclude these orders and proceed with the calculation or cancel the operation to prevent the creation of incomplete consumption journal lines. This enhancement addresses the issue reported in bug ID #229652.

2407.0.0.0

Release Note • 9/3/2024 • 1 min read

Enhancements/Modifications

With this release of the Aptean Process Manufacturing extension, the dimensions for certain items are correctly applied to the production order line. This applies to:

- Items with the **Manufacturing Policy** field set to *Make-to-Order* on the **Item Card** page. This function takes place only when the **Default Dimension Priorities** page is configured to use the item's dimensions, rather than inheriting them from the parent item.
- Items added through the **Add Unplanned Output** action on the production order line.
- Co-products.

2406.1.0.0

Release Note • 8/20/2024 • 1 min read

Resolved issues

The following issues have been resolved in this release.

ID	Description
221313	The system generates movement lines for items with the **Component Pick Method** field set as blank on the **Prod. Order Components** page. This issue occurs when running the **Create Consolidated Production Movement** report.
224367	The system displays an incorrect value in the **Quantity** field on the **Consumption Journals** page, generated through consolidated consumption calculations, which does not match the rounding precision specified for the consumption item on the associated **Item Card** page.

2406.0.0.0

Release Note • 8/20/2024 • 1 min read

Enhancements/Modifications

This extension has been updated to ensure interoperability with the Aptean Shop Floor Production extension. To know more, see What's new in version 2404.0.0.0.

2405.12.0.0

Release Note • 8/6/2024 • 1 min read

Enhancements/Modifications

With this release of the Aptean Process Manufacturing extension, the **Use Dimension for Consumption Posting from** field on the **Process Manufacturing Setup** page is obsolete. The dimensions for consumption items are now managed by the **Default Dimension Priorities** page, a standard feature of Business Central. This enhancement addresses the issue reported in bug ID #220435.

UI/UX changes

The **Use Dimension for Consumption Posting from** field is removed from the **Process Manufacturing Setup** page.

2405.11.0.0

Release Note • 7/24/2024 • 1 min read

Enhancements/Modifications

With this release of the Aptean Process Manufacturing extension, the following integration events have been added within the *70219529 ConsolidatedProdMov16FDW* codeunit to enhance customization:

- *OnBeforeInsertNeededInventoryBuffer*
- *OnBeforeModifyNeededInventoryBuffer*
- *OnCalculateAvailableInventoryOnBeforeNeededInventoryBufferFindSet*

2405.10.0.0

Release Note • 7/15/2024 • 1 min read

Resolved issues

The following issue has been resolved in this release.

ID	Description
213983	An error occurs when creating a released production order with an item set to *Backflushing* in the **Flushing Method** field on the associated **Item Card** page. This issue arises when finishing the released production order with a partial quantity.

2405.9.0.0

Release Note • 7/9/2024 • 1 min read

Resolved issues

The following issue has been resolved in this release.

ID	Description
208802	The system fails to display the **To Bin Code** and **To Zone Code** field values on the **Movement Worksheets** page, and the **Bin Code** and **Zone Code** field values on the **Warehouse Movement** page during the creation of the movement worksheet and warehouse movement. This issue arises when the **Use Prod. Order Component Bin Code** toggle on the **Create Consolidated Production Movement** page is turned on.

2405.8.0.0

Release Note • 7/4/2024 • 1 min read

Resolved issues

The following issues have been resolved in this release.

ID	Description
211375	The system incorrectly calculates the **Quantity** field value on the **Internal Movement** page when the internal movement is created via the **Create Consolidated Production Movement** page and the **To Bin Code** field value is associated with a bin containing multiple lots.
212263	An error occurs upon executing the **Change Production Scenario** action on the **Production Order Scheduling** page when executing the **Change Production Scenario** action. This issue arises when an item assigned to a co-product is used in the released production order lines without including the co-product.

2405.7.0.0

Release Note • 7/3/2024 • 1 min read

Resolved issues

The following issue has been resolved in this release.

ID	Description
213251	The system fails to update the dimensions for output items correctly on the **Production Journal** page associated with the production orders. This issue occurs when the **Use Dimension for Consumption Posting from** field is set to *Consumption Item* on the **Process Manufacturing Setup** page.

2405.6.0.0

Release Note • 6/24/2024 • 1 min read

Resolved issues

The following issue has been resolved in this release.

ID	Description
212021	The system fails to update the **Location** field on a production order when downtime is added via the **Production Order Scheduling** page.

2405.5.0.0

Release Note • 6/19/2024 • 1 min read

Resolved issues

The following issues have been resolved in this release.

ID	Description
209096	The system displays an incorrect value in the **Expected Qty.** field on the **Production Variance** page when the **Unit Cost Calculation** field is set to *Units* in the associated work center.
212791	The system displays an incorrect value in the **Expected Qty.** field on the **Production Completion Analysis** report when the **Unit Cost Calculation** field is set to *Units* in the associated work center.

2405.4.0.0

Release Note • 6/14/2024 • 1 min read

Resolved issues

The following issue has been resolved in this release.

ID	Description
199647	Permission errors occur while performing production activities in the Aptean Shop Floor Production Power App when users have *Basic* permission sets for the integrated Aptean Process Manufacturing extension.

2405.3.0.0

Release Note • 6/11/2024 • 1 min read

Resolved issues

The following issues have been resolved in this release.

ID	Description
206094	Upon running the **Calculated Consolidated Consumption** report with the **Create Consumption Journal lines** toggle turned on for a released production order with blank value in the **Finished Output** field, the system generates the associated consumption journal entries.
209970	The system incorrectly updates the **Unit of Measure Code** field value on the **Released Production Order** page even after executing the **Accept Split Plan** action on the associated **Production Split Worksheet** page.

2405.2.0.0

Release Note • 6/10/2024 • 1 min read

Enhancements/Modifications

The Aptean Process Manufacturing extension has been enhanced to ensure smooth operation when handling multiple lots. This also includes compatibility with the **Include Lines for Shortage** and **Ignore Zone Filter** toggles on the **Create Consolidated Production Movement** page.

2405.1.0.0

Release Note • 6/4/2024 • 1 min read

Enhancements/Modifications

This extension has been updated to fix the output registration issue for production orders in the Shop Floor Production Power App.
This update addresses the issue reported in the bug ID #196992.To know more, see What's new in version 3.16.164206.0

2405.0.0.0

Release Note • 5/31/2024 • 1 min read

Features

With this release of the Aptean Process Manufacturing extension, you can:

- Use the **Create Consolidated Production Movement** page, optimized for locations using zones.
- Use the **Ignore Zone Filter** toggle on the **Create Consolidated Production Movement** page to create the internal movements and inventory movements, even when the bins specified for the item and component lines have different zone codes. To know more, see Consolidated Pick and Consolidated Consumption.

UI/UX changes

The **Ignore Zone Filter** toggle is added to the **Create Consolidated Production Movement** page.

2404.0.0.0

Release Note • 5/29/2024 • 2 min read

Features

With this release of the Aptean Process Manufacturing extension, you can:

- Use the backward flushing method for component items irrespective of whether the **Reallocate Consumption from Main Item** checkbox is selected on the production BOM line. Additionally, when this configuration is active, the backward flushing method function occurs first upon changing the production order status to *Finished*. Subsequently, the consumption item reallocation function takes place.
- Specify if the internal movement lines should include the inventory demand exceeding the available supply when creating the internal movements through the **Create Consolidate Production Movement** page.
- Exclude the internal movement lines that lack values in either the **From Bin Code** or **To Bin Code** fields while creating inventory movement.

For more information, see Consolidated Pick and Consolidated Consumption.

UI/UX changes

The **Include Lines for Shortages** toggle is added to the **Create Consolidated Production Movement** page.

Resolved issues

The following issues have been resolved in this release.

ID	Description
194535	When executing the **Optimize Batch Size** action on the **Released Production Order** page, the system updates the **Routing No.** field in the header with the routing number linked to the item, instead of maintaining it with the routing number associated with the relevant production scenario on the line.
196663	• When executing the **Calculate Regenerative Plan** action on the **Planning Worksheets** page, the system creates lines for main and component items with different reference order numbers except for the last main and component items. This occurs when multiple main items are involved. • When executing the **Refresh Planning Line** action for multiple lines, specific lines are deleted from the **Planning Worksheets** page.

2403.0.0.0

Release Note • 5/29/2024 • 1 min read

Enhancements/Modifications

This extension has been updated to ensure interoperability with the features added in the Aptean Production Costing extension. To know more, see Highlights of version 2401.0.0.0.

2402.7.0.0

Release Note • 5/28/2024 • 1 min read

Enhancements/Modifications

The *SetHideDialog* function has been added to the *ConsolidatedProdMov16FDW* codeunit to hide the notifications or error messages triggered by the codeunit.

2402.6.0.0

Release Note • 4/29/2024 • 1 min read

Resolved issues

The following issue has been resolved in this release:

ID	Description
196995	When creating production orders with co-products from the **Planning Worksheet** page, the co-product lines on the associated **Production BOM Version** page are not considered. As a result, the co-product lines are not added to the corresponding planned or firm planned production orders.

2402.5.0.0

Release Note • 4/17/2024 • 1 min read

Enhancements/Modifications

With this release of the Aptean Process Manufacturing extension, the Co-Products are incorporated into the production orders created from the **Planning Worksheets** page, ensuring that production order lines and components are updated as required.

> **Note**
>
> The changes mentioned are only applicable to the BC version 23.5 and later versions.

2402.4.0.0

Release Note • 4/4/2024 • 1 min read

Resolved issues

The following issue has been resolved in this release:

ID	Description
189675	When posting the **Production Journal** associated with a **Released Production Order** for which the **Planning Worksheet** report has been generated, an error prompts for a **Lot No.** despite one already being assigned.

2402.3.0.0

Release Note • 3/22/2024 • 1 min read

Resolved issues

The following issue has been resolved in this release:

ID	Description
186662	An error occurs when attempting to create an **Internal Movement** via **Create Consolidated Production Movement** action for partial demand when inventory exists with the same lot and license plate number.

2402.2.0.0

Release Note • 2/9/2024 • 1 min read

Resolved issues

The following issues have been resolved in this release:

ID	Description
176197	• An error occurs upon executing the **Auto Fill Quantity to Handle** action for an **Inventory Movement** generated via **Create Consolidated Production Movement** with the **Allowed Over Pick Consolidated Movement** toggle on the **Process Manufacturing Setup** page turned on. • An error occurs in the Aptean **Mobile Warehouse** app when completing the movement through the TAKE action for an **Inventory Movement** generated via **Create Consolidated Production Movement** with the **Allowed Over Pick Consolidated Movement** toggle on the **Process Manufacturing Setup** page turned on.

2402.1.0.0

Release Note • 1/24/2024 • 1 min read

Resolved issues

The following issue has been resolved in this release:

ID	Description
169144	When manually creating a production order, the **Production BOM No.** and **Production BOM Line No.** fields remain blank on the **Prod. Order Components** page.

2402.0.0.0

Release Note • 1/24/2024 • 1 min read

Features

With the features added in this release of the Aptean Process Manufacturing extension, you can

- Include or exclude the run time of the resource for cost roll-up purposes without affecting the overall run time of a production order.
- Post consumption on substitute items when there is a shortage of the original component to fulfill a production order due to partial consumption.

Enhancements/Modifications

- For Planned and Firm Planned Production Orders, you can now set the **Open Shop Floor Bin Code** field value on the Prod. Order Component line.
- The performance of the **Independent BOM Cost Share Distribution** report is improved by reducing the processing time. For more information, see Independent BOM Cost Share Distibution Report.

UI/UX changes

The **Prod. Routing Zero Run Time** toggle is added to the **Posting** FastTab on the **Work Center** page.

Resolved issues

The following issues have been resolved in this release:

ID	Description
169140	The Bin Codes are different on the Component lines of the Planned and Firm Planned Production Orders than on the Released Production Order.
161414	The Independent BOM Cost Share Distribution report crashes, making it non-functional.

2401.1.0.0

Release Note • 1/24/2024 • 1 min read

Resolved issues

The following issue has been resolved in this release:

ID	Description
160912	The **Calculate Regenerative Plan** action on the **Planning Worksheet** page generates a **Reservation Entry** with the **Status** field set as *Reservation* instead of *Tracking* when the **MTO Production Depends Only on Components** toggle on the **Process Manufacturing Setup** page is turned on.

2401.0.0.0

Release Note • 1/10/2024 • 1 min read

Features

With this release of the Aptean Process Manufacturing extension, you can:

- View the shop floor production status of the selected output item and time entries of the selected work or machine center. Additionally, the **Expected Quantity** field accurately displays the calculated value for the routing lines on the **Material and Capacity Cost Details** page. For more information, see Production Variances.
- Filter the production order routing lines with variances by updating the **Capacity Variance % Filter** on the **Production Completion Analysis** report page. The report displays each production order routing line separately, including details like **Item No.**, **Item Description**, **Qty. Per**, **Expected Qty**, **Actual Qty**, **Variance**, and **Variance %**. For more information, see Production Completion Analysis Report.

UI/UX changes

The following UI/UX changes have been made in this release:

- The **Production Variances** action is added to the **Change Production Order Status** page.
- The **Shop Floor Production Status** and **Show Time Entries** actions are added to the **Material and Capacity Cost Details** page.
- The **Capacity Variances % Filter** field is added to the **Production Completion Analysis** report page.

2303.1.0.0

Release Note • 12/26/2023 • 1 min read

Resolved issues

The following issue has been resolved in this release:

ID	Description
160473	Warehouse entries are created despite the error regarding insufficient inventory while registering the Inventory Movement created from a consolidated pick.

2303.0.0.0

Release Note • 12/26/2023 • 1 min read

Features

With this release of the Aptean Process Manufacturing extension, you can

- Consider **Yield%** for estimating the **Input** and **Output Quantity per Batch**, **Quantity per**, and **Output Quantity per (WU)** fields. For more information, see Yield Percentage on Production BOM lines.
- Update the **Location Code** field based on the new **Production Order** created, selected **Item**, and **Variant Code** while creating a **Released Production Order**.
- Determine the bin to be used for Production Order Components through the **Open Shop Floor Bin Relations** page. For more information, see Open Shop Floor Bin Relations.
- Use the **Refresh Production Order** action for a **Released Production Order** to update the bin from the **Open Shop Floor Relations** page for the Production Order Components.

UI/UX changes

The **Open Shop Floor Bin Relations** page has been added in this release.

2302.2.0.0

Release Note • 12/7/2023 • 1 min read

Resolved issues

The following issue has been resolved in this release:

ID	Description
154707	An error occurs when attempting to change a Production Order status to Finished. This error is due to existing reservations on other documents, despite all components being set as backflushed, having no reservation entries, and having sufficient stock available in the bin with Lot Tracking turned on.

2302.1.0.0

Release Note • 11/29/2023 • 1 min read

Resolved issues

The following issue has been resolved in this release:

ID	Description
157025	An error occurs while running the **Create Consolidate Production Movement** report for an item with a license plate tracked **Location Code**.

2302.0.0.0

Release Note • 11/15/2023 • 1 min read

Features

With the features added in this release of the Aptean Process Manufacturing extension, you can use the **Optimize Batch Size** action to calculate the optimized batch size in the **Firm Production Order** and **Released Production Order**. For more information, see Batch size in Production Order and Component lines.

UI/UX changes

The following UI/UX changes have been made in this release:

- The **Optimize Batch Size** action is added on the **Lines** FastTab of the **Released Production Order** page.
- The **Quantity per Batch** field is added on the **Released Prod. Order Lines** page.
- The **Optimize Batch Size** FastTab is added on the **Process Manufacturing Setup** page.
- The **Use Batch Run Time** checkbox is added on the **Lines** FastTab of the **Routing** and **Prod. Order Routing** pages.

2301.1.0.0

Release Note • 10/17/2023 • 1 min read

Resolved issues

The following issues have been resolved in this release:

ID	Description
145774	While running the **Create Consolidated Production Movement** report for the Released Production Order, the Inventory Movement line is created for a single lot, even though multiple lots exist in the same bin. This issue occurs when using Item Reclassification Journals to move the inventory to a different bin and then relocate it back to the original bin.
150487	The Consumption Journal lines are created incorrectly after running the **Calculate Consolidated Consumption** report. Subsequently, when you post the **Consumption Journal** for the consolidated consumption item, the system fails to generate negative item weight ledger entries; as a result, the **Inventory (KG)** field displays inaccurate quantity on the **Items** page.

2301.0.0.0

Release Note • 10/18/2023 • 1 min read

Features

With this release of the Aptean Process Manufacturing extension, you can set the **Open Shop Floor Bin Code** field value on the **Prod. Order Component** line. For more information, see Consolidated pick and consolidated consumption.

UI/UX changes

The **Use Open Shop Floor Bin** toggle is added on the **Item Card** page and **Stockkeeping Unit Card** page.

1.35.118749.0

Release Note • 9/20/2023 • 1 min read

Resolved issues

The following issue has been resolved in this release:

ID	Description
146879	The **Net Quantity (Base)** field value is not rounded correctly for both catch weight and non-catch weight items on the **Consumption Reallocation Item** lines of the Released Production Order. This leads to inaccurate rounded values in the **Normative Consumption** and **Consumption Pro Rata** fields on the **Consumption Reallocation Item** lines of the Finished Production Order.

1.35.117069.0

Release Note • 9/13/2023 • 1 min read

Resolved issues

The following issue has been resolved in this release:

ID	Description
146049	The **Production Scenarios** list page is accessible from the Search icon.

1.34.116615.0

Release Note • 9/8/2023 • 1 min read

Resolved issues

The following issue has been resolved in this release:

ID	Description
144890	When the **Flushing Method** is set to *Backward* on the **Prod. Order Components** page, the system fails to update the order based on the associated Bin Content, resulting in an error.

1.33.113842.0

Release Note • 8/23/2023 • 1 min read

Resolved issues

The following issue has been fixed in this release:

ID	Description
137484	On the **Production BOM** page, an error is displayed when selecting *Certified* in the **Status** field.

1.33.113274.0

Release Note • 8/17/2023 • 1 min read

Enhancements/Modifications

Modifications were made for this extension to accommodate registering consumption items used for multiple outputs on the production order lines of the main item. When opening a **Production BOM** page, the fields on the **Co-product** FastTab are automatically populated.

UI/UX changes

The following UI/UX change has been made in this release:

- The **Co-Product** checkbox is removed from the **Lines** FastTab.
- The **Co-product** FastTab on the **Production BOM** page is made visible by default even though the **Co-product** toggle is not turned on, on the **General** FastTab.

1.32.112530.0

Release Note • 8/9/2023 • 1 min read

Resolved issues

The following issue has been fixed in this release:

ID	Description
137116	On the **Production BOM** page, the **Lines** FastTab displays irrelevant records from the **Co-Product** FastTab.

1.31.110844.0

Release Note • 7/27/2023 • 1 min read

Features

With this release of the Aptean **Process Manufacturing** extension, you can use the Production Completion Analysis Report to ensure that all output and consumption entries have been posted and review any variances between expected and actual output/consumption. For more information, see Production Completion Analysis Report.

1.30.107188.0

Release Note • 7/12/2023 • 1 min read

Enhancements/Modifications

Modifications were made for this extension to accommodate the changes in the Aptean Shop Floor Production extension. To know more, see Release Notes.

1.29.106190.0

Release Note • 6/28/2023 • 1 min read

Resolved issues

The following issue has been fixed in this release:

ID	Description
126817	When a **Firm Production Order** is created from **Planning Worksheets** for an item with **Production BOM No.** set as *Default* on the **Item Production Scenarios** page, the system deletes the reservation entries associated with it and displays an incorrect value for **Reserved Quantity**.

1.28.105552.0

Release Note • 6/27/2023 • 1 min read

Resolved issues

The following issue has been fixed in this release:

ID	Description
118788	The Production BOM number for co-products is updated incorrectly in the released production order line when changing the main item using the Change Production Scenario function.

1.27.105214.0

Release Note • 6/22/2023 • 1 min read

Resolved Issues

The following issue has been fixed in this release:

ID	Description
129978	When a **Firm Planned Prod. Order** or **Planned Production Order** is created from **Planning Worksheets** by executing the **Carry Out Action Message Plan** action, the system fails to display the **Work Shift Code**.

1.26.102754.0

Release Note • 6/8/2023 • 1 min read

Resolved Issues

The following issue has been fixed in this release:

ID	Description
126727	The system restricts the installation of the **Aptean Process Manufacturing** extension.

1.25.101337.0

Release Note • 5/31/2023 • 1 min read

Resolved Issues

The following issue has been fixed in this release:

ID	Description
118426	In Power Apps, when the **Lot No.** is selected on the **Register Input** page, the system retrieves the **Bin Code** values that are not related to the specified lot number instead of filtering the bin code associated with it.

Important

Prior to this upgrade, it is necessary to complete all production orders that are currently in progress and have posted capacity ledger entries.

1.24.101016.0

Release Note • 4/3/2023 • 1 min read

Resolved Issues

The following issues were fixed in this release:

ID	Description
111256	An error occurs when creating a production order from the sales order for an item that has different values specified for the base unit of measure and the unit of measure in the production BOM.
115527	In the Shop Floor Production extension, when the **Production Split Worksheet** function is executed on the **Released Production Order** page, the lines are not updated accurately on the **Prod. Order Routing Line** page.
117839	When creating a production order with the Make-To-Order items from the Sales Order, Order Planning, or Planning Worksheet, the component items linked to the main items are not shown on the document lines.
118312	The Batch Sizes fields information is not properly updated on the created Production Order when it is created from the Planning Worksheet.

1.23.96426.0

Release Note • 5/8/2023 • 1 min read

Resolved Issues

The following issues have been fixed in this release:

ID	Description
111889	While creating a Production Order from a **Planning Worksheet**, the **Production Order Components** are not correctly updated based on **Production BOM** page with respect to **Starting Date** and **Ending Date**.
111888	An error occurs while creating a Production Order from a **Planning Worksheet** if the line **No.** is not continuous on the **Production BOM** page.
114455	The **Consolidated Pick Method** field on the **Item Card** page is not editable when the default option, *Manual* is not changed in the **Flushing Method** field.
113473	An error occurs while creating a **Released Production Order** when *Family* option is selected in the **Source Type** field.

1.22.95005.0

Release Note • 4/29/2023 • 1 min read

Resolved Issues

The following issue has been fixed in this release:

ID	Description
115249	When a **Firm Planned Production Order** is created from Planning Worksheets or Order Planning, the **Scrap %** specified on the Production BOM component lines is omitted from the calculation of **Expected Quantity**. This results in incorrect component demand and derived demand in the Production Order component lines.

1.21.93890.0

Release Note • 4/29/2023 • 1 min read

Resolved Issues

The following issues have been fixed in this release:

ID	Description
111576	The error message displayed when generating a test report on calculating the consolidated consumption without posting an output on a released production order is inaccurate.
114302	A typo **Production Spilt Worksheet** is displayed instead of **Production Split Worksheet** in the environment.

1.20.93099.0

Release Note • 4/29/2023 • 3 min read

Features

With this release of the Aptean Process Manufacturing extension, you can:

- Use the Catch Weight Item in Unplanned Consumption. To know more, see here.
- Use the Catch Weight Item in Consolidated Pick. To know more, see here.
- Use the Catch Weight Item in Consolidated Consumption. To know more, see here.
- View the weight quantity fields on the Consolidated Consumption report. To know more, see here.
- Use the bin code that is assigned to the production order component lines while using the Create Consolidated Production Movement function. To know more, see here.
- Transfer the entire required quantity to the place bin regardless of the quantity that already exists in it while using the Create Consolidated Production Movement function. To know more, see here.
- Filter the production order component lines by entering the starting and ending due dates while using the Create Consolidated Production Movement function. To know more, see here.
- Filter the production order component lines by applying the relevant filters while using the Create Consolidated Production Movement function. To know more, see here.
- Round up the required inventory quantity that is transferred while using the Create Consolidated Production Movement function. To know more, see here.
- Include the component lines on the **Independent BOM Cost Share Distribution** report when the production BOM/production BOM version lines have the **Production BOM** type. To know more, see here.

UI/UX Changes

The following UI/UX changes have been made in this release:

- The **Unit of Measure (Weight Qty.)**, **Consolidated Consumption (Weight Qty.)**, and **Normative Consumption (Weight Qty.)** fields are added to the Consolidated Consumption report page if a catch weight item is used as consolidated consumption item.
- The **Use Prod. Order Component Bin Code** and **Ignore Contents of To Bin Code** toggles are added to the **Create Consolidated Production Movement** page.
- The **Starting Due Date** and **Ending Due Date** fields are added to the **Create Consolidated Production Movement** page.
- The **Filter: Prod. Order Component** FastTab is added to the **Create Consolidated Production Movement** page.

- The **Until Due Date** and **Until Due Time** fields are removed from the **Create Consolidated Production Movement** page.

Resolved Issues

The following issue has been resolved in this release:

ID	Description
114655	The **Quantity (KG)** field on the **Item Weight Ledger Entries** page is updated with an opposite sign convention to the **Quantity** field on the **Finished Production Order** page for a selected item.

1.19.91534.0

Release Note • 4/29/2023 • 1 min read

Features

With this release of the Aptean Process Manufacturing extension, you can use the Catch Weight Item:

- As a Co-Product. To know more, see here.
- As a Reallocate consumption of a Co-product. To know more, see here.
- As an unplanned Output item. To know more, see here.
- As a Reallocate consumption of an Unplanned Output. To know more, see here.

Resolved Issues

The following issues have been resolved in this release:

ID	Description
105233	The status of the production order cannot be changed from *Released* to *Finished* due to the **Production Component Line No. Reallocation** field on the **Consumption Reallocation Item** page contains a value that does not exist in the related **Prod. Order Component** table.
109157	When the **Status** field on the **Released Production Order** page with co-products or unplanned outputs is set to *Finished*, an error stating that the *Expiration Date is before the posting date* appears. This occurs when **Strict Expiration Posting** toggle on the **Item Tracking Code** Card is turned on and when the consumption takes place before the expiration date, but the status of the Production Order is changed from *Released* to *Finished* at a later date.

1.18.90072.0

Release Note • 4/3/2023 • 1 min read

Resolved Issues

The following issue has been fixed in this release:

ID	Description
109225	When using the **Production Split Worksheet** function to split a **Released Production Order** with the status set as *Production*, a new duplicate production order is created before throwing an error.

1.17.88000.0

Release Note • 4/3/2023 • 1 min read

Resolved Issues

The following issues have been fixed in this release:

ID	Description
108319	While creating a new firm planned production order from the **Planning Worksheet** page, the component lines on the existing **Firm Planned Production Order** are deleted. This also occurs while creating the planned production order.
104789	If the **Quantity** field on the **Lines** FastTab of the **Released Production Order** page contains decimal values, an error occurs when selecting the **Production Split Worksheet** function.
105508	While executing the **Change Production Scenario** function for a main item on the **Released Production Order** page, the Co-Product lines get deleted.
97899	The associated options are not listed in the **Filter list by** section when selecting *Component Pick Method* in the filter pane on the **Items** page.

1.16.87026.0

Release Note • 4/3/2023 • 1 min read

Resolved Issues

The following issues have been fixed in this release:

ID	Description
95821	When creating a Released Production Order with a Co-Product, the value in the **Routing No.** field is not inherited from the Item page to the Released Production Order Lines on executing **Refresh Production Order** action.
97772	No error occurs when **Refresh Production Order** action is performed after the creation of Released Production Order with a Co-Product for which the **BOM for Co-Product** field is empty on the **Production BOM** page. This works similarly for **Planned Production Order** and **Firm Planned Prod. Order**.
102473	An error occurs while splitting the Production Order when the **Manual Nos.** checkbox on the **No. Series** page was cleared. Also the deleted Released Production Order is displayed on the **Production Order Scheduling** list page.
100164	An error occurs when changing the status of the Planned Production Order or Firm Planned Prod. Order to Released Production Order. Also, the **Expected Quantity** and **Remaining Quantity** fields on the **Prod. Order Components** page are not updated.

1.15.77801.0

Release Note • 4/3/2023 • 1 min read

Resolved Issues

The following issues were fixed in this release:

ID	Description
62065	When calculating the **No. of Batches** on the production order line, the system ignores the **Scrap** % that is defined on the Production BOM line.
93231	The BOM lines are reset whenever the status of a production BOM changes.

1.14.77123.0

Release Note • 4/3/2023 • 2 min read

Features

With the features added in this release of the Aptean Process Manufacturing extension, you can:

- Set up the Default Weight Calculation Type based on the type of Production BOM on the Production BOM lines. These values are inherited from the Item Card and the Process Manufacturing Setup page.
- Integrate the Production Scenario for the Co-Product with the Main Item's Production Scenario. To know more, see Integration of Production Scenario.
- View all the information about the co-products for the production of the main item on the Co-Product FastTab added on the Production BOM page.
- Delete a Production BOM used in a production line when no Co-Products are used. To know more, see Deletion of Production BOM.
- Change the Production Scenario for the main items. To know more, see Integration of Production Scenario.
- Create a Split Production order for Main Item along with the Co-Products. To know more, see Integration with Split Production Order function.

> **Note**
>
> Existing users must execute Conversion Script action to upgrade to the new version changes . To know more, see Setup to integrate with the new version.

Enhancements/Modifications

Modifications were made for this extension to accommodate the changes in the Aptean Reporting extension. To know more see, What's new in version 1.4.77063.0.

1.13.75018.0

Release Note • 4/3/2023 • 1 min read

Enhancements/Modifications

Modifications were made for this extension to accommodate the changes in the Aptean Catch Weight extension. To know more, see Aptean Catch Weight extension.

1.12.73342.0

Release Note • 4/3/2023 • 1 min read

Resolved Issues

The following issues were resolved in this release:

ID	description
68132	On the Production BOM lines, the calculation for the **Quantity per** field is not accurate when weight unit of measure is used in the **Unit of Measure Code** field.
77630	While clicking the Go to next/previous record button on the **Production BOM** page, the lines details are not updated.
83789	Unable to create production order even if the users are assigned with the required permissions.

1.11.71650.0

Release Note • 4/3/2023 • 1 min read

Resolved Issues

The following issue is fixed in this release:

ID	Description
85509	When using the Calculate Regenerative Plan and Calculate Net Change Plan functions on the planning worksheet, the reference order numbers for the component items (with Make-To-Order as the Manufacturing Policy) and the main item (with Make-To-Stock as the Manufacturing Policy) were different.

1.10.67044.0

Release Note • 4/3/2023 • 1 min read

Resolved Issues

The following issues were fixed in this release:

ID	Description
72024	When Production Orders with *Sent* status are resent, they are rejected by the APM OEE connector.
78447	During reallocation of consumption posting for Co-product, the Item Ledger Entry is assigned with incorrect Order Line No.
73297	When posting the Warehouse Receipt and creating the pick from Warehouse Shipment, a permission error occurs.

1.9.64658.0

Release Note • 4/3/2023 • 1 min read

Modifications

The **Production Order Status** enum function was modified at the code level, such that the *Firm Planned* option is only called to get the **Firm Planned Order Nos.** number series. Previously, we encountered an error when the function called two options, *Released*, and *Firm Planned*.

1.8.64111.0

Release Note • 4/3/2023 • 2 min read

Features

You can perform the following activities with the features included in this release:

View the main items with Make-To-Stock as Manufacturing Policy as primary lines on a production order and/or on the planning worksheet, while its component items with Make-To-Order as Manufacturing Policy appear as secondary lines. This is achieved through the new **MTO Production Depends Only on Components** toggle is added on the **Process Manufacturing Setup** page. When enabled, the main items with Make-To-Stock as Manufacturing Policy will appear as primary lines on a production order and/or on the planning worksheet, while its component items with Make-To-Order as Manufacturing Policy will appear as secondary lines. For more information, see Add component items to the line.

Define the default value to be used for the location code on the released, planned, and firm production orders that are created manually. This is achieved through the new **Default Manufacturing Location** field added on the **Process Manufacturing Setup** page. The production orders that are created through the planning worksheets will not take this location code by default.

Create output journals for multiple production orders based on the filters you choose. This is achieved through the new **Explode Routing – Multi** action is added on the **Output Journals** page. On the action bar, select **Actions** > **Functions** > **Explode Routing – Multi** to perform this function. The Output Journals page should be empty before executing this action.

1.7.62206.0

Release Note • 4/3/2023 • 1 min read

Features

You can split a production order line into multiple orders or multiple lines within the same production order. For more information, see Production Split Worksheet.

1.6.59768.0

Release Note • 4/3/2023 • 1 min read

Features

A new **Allowed Over Pick Consolidated Movement** toggle is added on the **Process Manufacturing Setup** page under the **General** FastTab. This toggle allows you to over-pick in an inventory movement when enabled. You can also enable this **Allowed Over Pick Consolidated Movement** toggle on the Assisted Setup page. For more information, see Over-pick in an inventory movement.

1.5.56833.0

Release Note • 12/26/2023 • 1 min read

Resolved issues

The following issues have been resolved in this release:

ID	Description
38835	When using the Production Unit of Measure in the Production scenario, the quantity for co-products is incorrectly calculated if you modify the Base Unit of Measure and the Unit of Measure setup for the main item on the Production BOM.
53425	When using Create Consolidated Production Movement functionality to create production movement for the Directed Location, the results are not available.
56207	When the Firm Planned Production Orders are created through Order Planning, the value in the Component Pick Method field is not correctly populated on the component lines of the Released Production Order.
58595	An error occurs when finishing the production order that contains multi-component line work orders with co-products. To resolve this issue, you must upgrade the Integration Layer (ILY) and License Plating (LPL) extensions to the latest release.

1.5.54945.0

Release Note • 12/26/2023 • 1 min read

Features

With the features added in this release of the Aptean Process Manufacturing extension, you can

- Configure the Routing/Version and Overhead that will be used for costing analysis relative to a particular Production BOM Version using the **Production BOM Cost Share Setup** page. For more information, see Production BOM Cost Share Setup.
- Perform calculations in relation to a **Production BOM** or **Version** independent of any item record and use the Routing/Version/Overhead as per the **Production BOM Cost Shares Setup** record for the respective BOM **Version**. This is achieved using the **Independent BOM Cost Share Distribution Report**. For more information, see Independent BOM Cost Share Distribution Report.
- View the differences between the Prod. BOM Components along with the breakdown of costs for each version and ultimately a single 'Total Cost/LB' (or KG) for each BOM Version using the **Cost Matrix per Version** page. For more information, see Cost Breakdown in Matrix per Version.

Enhancements/Modifications

Minor technical changes were made to seamlessly work with the Aptean Reporting extension, which provides easy-to-read Sales and Manufacturing reports. These reports can be printed or saved as a file.

1.4.50889.0

Release Note • 4/3/2023 • 1 min read

Enhancements/Modifications

Minor technical changes were made to keep our apps in line with *updated* coding guidelines for Business Central.

Resolved Issues

The following issue has been fixed in this release:

ID	Description
54689	When moving an item to a production area and selecting "Consolidated" in the **Component Pick Method** field, an error message appeared stating that there was no reservation entry while posting consumption from the Mobile Warehouse client, even if "Never" is selected in the **Reserve** field for the item.

1.3.43747.0

Release Note • 4/3/2023 • 1 min read

Enhancements/Modifications

Minor technical changes were made to keep our apps in line with *updated* coding guidelines for Business Central.

Introduction

Article • 8/6/2024 • 2 min read

The Aptean Process Manufacturing (PRM) extension for Microsoft Dynamics 365 Business Central introduces a suite of specialized functionalities tailored specifically for the intricate demands of the food and beverage industry. With a focus on process manufacturing, this extension is meticulously designed to address the unique challenges encountered in producing, batching, and packaging operations. It offers a solution for managing bulk production batches through batch sizing and raw material quantity calculation, simplifying the backflushing process. It consolidates components and executes a single pick for all production orders scheduled on a particular date or assigned to a specific work center. It also features flexible consumption posting, allowing quick addition of extra lines to accommodate ingredient substitution or additional output.

Key aspects:

- **Process Manufacturing Setup**: Configure settings for complex processing, batching, and packaging procedures.
- **Weight and Yield Management**: Optimize batch sizing calculations for production batches and raw materials.
- **Backflushing for Lot-Tracked Items**: Streamline the backflushing process with an automated system.
- **Consolidated Pick and Consumption**: Simplify the picking process by consolidating components across multiple production orders.
- **Co-Products Management**: Allocate consumption between primary items and co-products for precise output tracking.
- **Handling Unplanned Output and Consumption**: Facilitate quick adjustments and additions to production orders.
- **Production Variances Monitoring**: Efficiently monitor and manage production variances.
- **Production BOM Cost Shares Setup**: Set up cost shares for efficient cost allocation.
- **Independent BOM Cost Share Distribution Report**: Generate comprehensive reports on cost shares distribution within the production BOM.
- **Cost Breakdown in Matrix per Version**: Analyze cost breakdowns across different production versions.
- **Production Split Worksheet**: Efficiently manage production splits.

Setup

Article • 10/29/2024 • 1 min read

The following setups are required.

- Manage permission sets
- Set up process manufacturing
- Set up production BOM with batch size
- Set up production order routing

Manage permission sets

Article • 10/29/2024 • 3 min read

Permission sets in Business Central define a user's access level to various features and data within this extension.

We provide the following system permission sets:

- Direct
- Indirect

Direct permission sets

Users with this permission set can perform specific actions directly without requiring additional approvals or workflows. These sets include permissions to read, modify, delete, and create data.

The direct permission set ID for this extension is *PROCESSMFGFDW*.

Indirect permission sets

Users with this permission set can perform specific actions. This is used in conjunction with other permission sets and typically involves additional conditions or approvals before an action can be completed.

The indirect permission set ID for this extension is *PROCESSMFGBASICFDW*.

User-defined permission sets

In addition to the system permission sets we provide, you can create new permission sets or copy system permission sets and modify or delete access to specific entities according to your requirements. For more information, see Assign permissions to users and groups.

Assign a permission set

1. Select the Search icon  , enter **Users**, and then choose the related link.
   The **Users** list page opens.
2. Navigate to the username for which you want to assign the permission set and select it.
   The **User Card** page opens.

3. On the **User Permission Sets** FastTab, in the **Permission Set** field, enter the valid permission set for this extension.
   The associated fields are automatically updated based on the entered value.
   The user has the necessary permissions to use the features of the Aptean Process Manufacturing extension, ensuring secure and role-based access.

Set up process manufacturing

Article • 11/26/2025 • 8 min read

In Manufacturing industries, it is common to first produce a bulk material (process manufacturing) which is then packed in trading units afterwards (e.g., carton boxes). Each trading unit contains a certain quantity of consumer units (e.g., bottles or cans).

The bulk material is often produced in a blender, a silo, a pan or a cutter, which are set up as work centers or machine centers in Dynamics 365 Business Central. Routings record which machine centers and/or work centers are required to produce the bulk material. To produce the bulk material, several raw materials and other ingredients may be blended and cooked in specific work- or machine centers.

The ingredients and their required proportions for a (semi-) finished end product are captured in a so-called BOM: a Bill of Materials. Each work center/machine center has its own capacity. For example, blender X has a capacity of 500 Kg. and blender Y has a capacity of 100 Kg.

For the preparation and execution of the manufacturing process, it is necessary to know how many batch sizes are needed to produce the desired quantity of a (semi-)finished product. It is also necessary to know the required quantity of the raw materials and ingredients (recorded in the BOM) per batch size.

With the Process Manufacturing, it is possible to answer these questions. The following topics will explain the functionality of this extension, illustrated by various examples. The Process Manufacturing documentation is structured as follows:

1. Process Manufacturing Setup
2. Description of the fields that are added to the Production BOM
3. Description of the fields that are added to the Production Order and Components
4. Explanation of the required setup and functionality through a number of scenarios
5. Overview of checks that are added to ensure correct system setup.

Set up Process Manufacturing

The Weight Unit, abbreviated to WU, specifies the unit of measure used to indicate weight regarding batch production processes.

1. Select the Search icon  , enter **Process Manufacturing Setup** and then choose the related link.
   The **Process Manufacturing Setup** page opens.
2. On the **General** FastTab, in the **Weight Unit (WU)** field, select the required unit from the list.

3. In the **Default Manufacturing Location** field, enter a default manufacturing location code for the production orders.
4. In the **Default Weight Calculation Type for BOM** field, select the desired option.
   This value is automatically inherited by the **Weight Calculation Type** field on the **Production BOM** page when *Production BOM* is selected on the **Type** field.
   You can change the **Weight Calculation Type** field value manually when required.
   The weight unit is now set up and will be used in batch production processes.
5. Turn on the **Dynamic BOM Line Weight Calculations** toggle to automatically calculate the values in the input and output batch fields on the production BOM lines. Additionally, when this toggle is turned on, the values for **Input Quantity per (WU)** and **Output Quantity per (WU)** fields are set to *0* if the related batch quantity field values are modified. For more information, see Process weight change percentage on production BOM lines.
6. Turn on the **Allow Direct Edit of BOM Line Output Quantity** toggle to manually adjust the output weight fields on the production BOM lines. This includes fields such as:

   - **Output Quantity per Batch** and **Output Quantity per Batch (WU)** fields for batch size lines.
   - **Output Quantity per (WU)** field for non-batch size lines.

   The changes to these fields will also dynamically update the **Process Weight Change %** field based on the calculations. If this toggle is turned off, output weight values will be indirectly affected by changes made to other related fields.

   > **Note**
   >
   > You can manually edit the output weight fields only when:
   >
   > - The **Weight Calculation Type** field is set to *Net Weight*.
   > - For batch-size lines, the **Input Quantity per Batch** and **Input Quantity per Batch (WU)** fields must have values greater than *0*.
   > - For non-batch size lines, the **Input Quantity per (WU)** field must have a value greater than *0*.

7. In the **Default License Plate No. Reallocation Item** field, select the required number series with the default 17-digit advanced warehouse management license plate numbers for co-products. This field is visible only when the *Aptean Beverage Advanced Warehouse Management for Drink-IT Edition* application name is enabled on the **Feature Control** page.
8. Turn on the **Exclude Dedicated Bins from Cons. Inv. Mov.** toggle to exclude dedicated bins from the available quantity calculations when creating inventory movements for consolidated consumption. When you turn on this toggle:

   - The system ignores dedicated bins when calculating available quantities for inventory movements.
   - The logic for creating internal movements always excludes dedicated bins from consideration.

> **Note**
>
> This setting applies only to inventory movements generated through the consolidated consumption process.

9. On the **Batching** FastTab, in the **Rounding Method for Quantity per Calculation** field, select the required option to determine how the system rounds the **Quantity per** field value when the **Calculate Quantity per** action is executed on the **Production BOM** page.

   - *Nearest* – Rounds off to the nearest number based on the sixth decimal digit. This is the default option.
     - If the sixth digit is less than *5*, the value is rounded down (e.g., *0.783754* becomes *0.78375*).
     - If the sixth digit is *5* or greater, the value is rounded up (e.g., *0.783756* becomes *0.78376*).
   - *Down* - Keeps only the first five decimal places and ignores any digits beyond that (e.g., both *0.783754* and *0.783756* become *0.78375*).

10. In the **Batch Sizing Method** field, select one of the following options:

    - *Batch Size Calculation*: The system derives the batch size by summing the batch-component line quantities.
    - *Batch Size Entry*: Users manually enter the total batch size on the production BOM header, and the system scales batch component quantities accordingly.

11. In the **Default Optimization Method** field, select the desired option.

Option	Description
Equalized	Calculates the batch size that minimizes the number of complete batches while maintaining the overall quantity as close as possible to the required quantity.
Round using Standard	Uses Standard Batch Size from the item production scenario, which may result in an increase in the overall quantity to avoid partial batches.
Round using Maximum	Uses Maximum Batch Size from the item production scenario, which may result in an increase in the overall quantity to avoid partial batches.
Round using Minimum	Uses Minimum Batch Size from the item production scenario, which may result in an increase in the overall quantity to avoid partial batches.
Manual	Allows you to manually enter the number of batches and the quantity per batch.

12. In the **Base Batch Run Time UoM** field, select the required option.
    This will be the unit of measure code to calculate and optimize the time required to produce a specific quantity of production units within a batch using time units such as *days*, *hours*, or *minutes*.

13. Turn on the **Enable Automatic Optimization** toggle to allow the system to automatically optimize batch sizes for production orders. For more information, see Automatic optimization for batch size.
14. In the **Automatic Opt. Error Handling** field, select how the system should respond if the default optimization method set in the production scenario fails during automatic batch size optimization.

    - *Skip*: The system will not attempt optimization and skip the process.
    - *Round using Minimum*: The system will optimize the batch size using the round using minimum optimization method.
      For more information, see Automatic optimization for batch size.

15. Turn on the **Enable Optimization in Planning** toggle to allow the system to automatically optimize the batch size within planning worksheets. For more information, see Automatic optimization for batch size.

Set up production BOM with batch size

Article • 10/22/2025 • 50 min read

It is necessary to know how many batch sizes are required to produce the required quantity of a (semi) finished product for preparation and execution of the manufacturing process. It is also necessary to know the required quantity of the raw materials and ingredients (recorded in the BOM) per batch size. To get the above-mentioned insight in a production order concerning batch sizes, this extra information must be captured in a BOM. Also, by registering the quantities required per batch, it is possible to calculate the relative percentage of ingredients and quantity of the component required to produce the item. When the BOM lines are set up to be used for the batch sizes, the fields on the BOM header are calculated. These fields contain extra information calculated about the batch size.

1. Select the Search icon , enter **Production BOMs** and then choose the related link.
   The **Production BOMs** list page opens.
2. On the action bar, select **New**.
   The **Production BOM** page opens.
3. On the **General** FastTab, in the **No.** field, click the AssistEdit button to choose the required number series.
4. In the **Description** field, enter the description for the production BOM.
5. In the **Unit of Measure Code** field, select a value from the list.
   The system notifies you when modifying the **Unit of Measure Code** field value on batch size lines. Upon confirmation, the following fields will be cleared if they contain values, requiring manual updates.

   - Input Quantity per Batch
   - Input Quantity per Batch (WU)
   - Output Quantity per Batch
   - Output Quantity per Batch (WU)

6. In the **Batch Size Calculation** field, select an option.

   - If the **Batch Sizing Method** field value on the **Process Manufacturing Setup** page is set to *Batch Size Entry,* then this field has two options:
     Batch Size Entry and *None* where you can choose to manually define the batch size at the BOM header level, and the system scales component lines accordingly or not.
   - If the **Batch Sizing Method** field value on the **Process Manufacturing Setup** page is set to *Batch Size Calculation*, then this field has three options: *None, On Item,* and *On Phantom*.
     None indicates that batch sizes are not applicable for this BOM.
     On Item indicates that this BOM contains batch size details.
     On Phantom indicates that this BOM is a so-called phantom BOM, which is used in another BOM (with the **Batch Size Calculation** field value set to *On Item or On Phantom*) for batch size calculation.

7. In the **Batch Size Calculation** field, select *On Item* from the list.
8. On the **Batch Sizes** FastTab, in the **Batch Size for Item No.** field select the desired item number from the list.
   The item number is only mandatory when the type of Batch Size Calculation is set to 'On Item'. It is used to convert the batch weight from the Weight Unit into the Unit of Measure of the BOM header. For this conversion, the Item Units of Measure of the selected item are used.
9. In the **Target Batch Size (UoM)** field, enter the target batch size.
10. In the **Target Batch Size (WU)** field, enter the target batch size in weight unit.
11. On the **Lines** FastTab, select the required **No.**
    When working with batch sizes, the **Quantity per** field value can be manually updated even though they are automatically updated by the system.
12. In the **Scrap %** field, enter the percentage of the item that you expect to be scrapped in the production process.
13. Select the **Batch Size** checkbox. The Batch Size specifies whether the item on the BOM line is an ingredient of a batch production process.
    If the **Batch Size** checkbox is selected, the **Input Quantity per Batch** and **Input Quantity per Batch (WU)** fields can be edited. However, the **Quantity per** field value can be manually updated when the **Batch Sizing Method** field value is set to *Batch Size Entry* on the **Process Manufacturing Setup** page.
    In the **Input Quantity per Batch** field enter the quantity (expressed in the unit of measure on the BOM line) of the item on the BOM line when composing a batch before the production process.
    It internally calculates and populates the **Input Quantity per Batch (WU)** field value or vice versa.
    The **Input Quantity per Batch (WU)** field specifies the total weight (expressed in Weight Unit) of the item on the BOM line when composing a batch before the production process.

> **Note**
>
> The system automatically selects the **Batch Size** checkbox on all component lines when the **Batch Size Entry** method is utilized in the production BOM. You can also manually clear the checkbox if a component is not batch managed.

14. The **Output Quantity per Batch** and **Output Quantity per Batch (WU)** fields are automatically populated based on the entry of values in either the **Input Quantity per Batch** or **Input Quantity per Batch (WU)** field.
    Fill in all the necessary field in the Production BOM lines and execute a function to calculate the units of batch component required to produce the parent item.

> **Note**
>
> You can manually adjust the values in the **Output Quantity per Batch** and **Output Quantity per Batch (WU)** fields when: - The **Allow Direct Edit of BOM Line Output Quantity** toggle on the **Process Manufacturing Setup** page is turned on. - The **Weight Calculation Type** field is set to *Net Weight*. - For batch-size lines, the **Input Quantity per Batch** and **Input Quantity per Batch (WU)** fields must have values greater than *0*. - For non-batch size lines, the **Input Quantity per (WU)** field must have a value greater than *0*.

For more information, see Set up process manufacturing.

15. On the action bar, select **Roll Up Batch Size** to calculate and update the batch size field values on the **Batch Sizes** FastTab based on the sum of all batch-controlled component inputs.
    Target Batch Size (UoM) = Sum of *Input Quantity per Batch (WU)* divided by sum of *Quantity per (WU)*
    Target Batch Size (WU) = Sum of *Input Quantity per Batch (WU)*

> **Note**
>
> - This action is enabled only when at least one batch-controlled component line exists on the **Production BOM** page. - When no batch-controlled lines are present, this action is disabled and displays an error message.

16. On the action bar, select **Re-Calculate Batch Lines** to recalculate all batch-controlled component quantities according to the updated batch size values.

> **Note**
>
> If no batch size is entered in a production BOM, this action remains disabled.

17. On the action bar, select **Actions** > **Other** >**Calculate Quantity per**.
    The **Quantity per** is calculated for the BOM lines that are set up for the batch process. The function uses the values in the **Output Quantity per Batch (WU)** and **Total Output Quantity per Batch (WU)** fields to calculate a Quantity per BOM line, expressed in the BOM line Unit of Measure.

> **Note**
>
> The **Quantity per** field value is rounded based on the configuration in the **Rounding Method for Quantity per Calculation** field on the **Process Manufacturing Setup** page. For batch size lines, this functionality works when the **Batch Size Calculation** field is set to *On Item* or *On Phantom*.

    For more information, see Set up process manufacturing.

18. In the **Product Yield** % field, enter a value within the range configured in the **Minimum Product Yield** % field. The default value is set to *100*. You can add this field using personalization.
    If the **Scrap** % field value on the **Process Manufacturing Setup** page is configured, the **Product Yield** % field value is updated within that range.

Batch size in Production Order and Component lines

When using BOMs with batch sizes, it is helpful to get information about batch sizes on the production order. The process operator can use this information to check if the total weight of all ingredients is correct before the

production process. The information can also be used to check if the total weight of the production batch after production is as expected. To allow these checks, multiple fields are added to the production order (components) line.

1. Select the Search icon  , enter **Released Production Orders** and then choose the related link.
   The **Released Production Orders** list page opens.
   The batch size fields are added to planned, firm planned, and released production orders.
2. Select the required **No.**
   The **Released Production Order** page opens.
3. On the **Lines** FastTab, the **No. of Batches** field displays the number of batches that are required to produce the quantity on the production order header, according to the selected BOM and Routing.
4. The **No. of Batches Rounded** field displays the rounded number of batches, based on the **No. of Batches** field.
5. The **Quantity in No. of Batches Rounded** displays the expected output quantity when the quantity in 'No. of Batches Rounded' is used in the production process.
6. The **Total Input Quantity per Batch (WU)** displays the total weight of a batch before the production process, expressed in the Weight Unit of Measure that was set up on the **Process Manufacturing Setup** page.
7. The **Total Output Quantity per Batch (WU)** displays the total weight of a batch after the production process, expressed in the Weight Unit of Measure that was set up on the **Process Manufacturing Setup** page.
8. The **Quantity per Batch** field is calculated by dividing the quantity of the line by the number of batches.

> **Note**
>
> The Quantity per Batch field is added to firm planned, and released production orders.

9. On the **Lines** FastTab, select **Functions Optimize Batch Size**.
   The **Optimize Batch Size** page opens.
   > [!NOTE]
   > The **Optimize Batch Size** action is also accessible on the action bar of the firm planned production order line. This action can only be executed for the main production line, not for the co-product or component lines. The system does not optimize the co-product or Make-To-Order component lines individually but adjusts their quantities according to the batch-optimized quantity of the main production line.
10. On the **General** FastTab, the **Original Quantity** field displays the quantity on the production order line.
    The values in the **Prod. Order No.**, **Production Scenario No.** and **Production BOM No.** fields are inherited from the selected production order line.
    > [!NOTE]
    > The **New Quantity** field is editable if the Batch Optimization Method is *Equalized*.
11. On the **Parameters** FastTab, enter the **Number of Batches** required.
    The **Batch Size** field is automatically populated based on the option selected in the **Batch Optimization** field.

> [!NOTE]
> If the **Batch Optimization** field is set as *Manual*, then the **Batch Size** field must be filled in manually.

12. On the **Optimize Method** FastTab, select the required value from the **Batch Optimization** dropdown list.

Option	Estimated Batch Size	Estimated Quantity
Equalized	Original Quantity/Number of Batches	Batch Size * Number of Batches
Round using Standard	**Standard Batch Size** field value on the **Item Production Scenario** page	Standard Batch Size * Number of Batches
Round using Maximum	**Maximum Batch Size** field value on the **Item Production Scenario** page	Maximum Batch Size * Number of Batches
Round using Minimum	**Minimum Batch Size** field value on the **Item Production Scenario** page	Minimum Batch Size * Number of Batches
Manual	Enter the value manually	Batch Size * Number of Batches

Note

The **Minimum Batch Size**, **Maximum Batch Size,** and **Standard Batch Size** field values should not be blank on the production scenario of the selected released production order line. The **Estimated Batch Size** field value should range between the minimum and maximum batch size of the associated production scenario.
To know more, see Process Manufacturing Setup.

1. On the **Calculation** FastTab, the **Estimated No. of Batches** field is non-editable, and the value is automatically populated from the **Number of Batches** field on the **Parameters** FastTab.
2. On the **Run Time Optimization** FastTab, turn on the **Optimize Run Time** toggle to activate the run-time functionality for the selected batches.
3. In the **Run Time Per Batch** field, enter the run-time value for a batch in decimal format.
4. The **Total Run Time** field displays the total duration of the process for all the batches, which is the result of the run time multiplied by the number of batches.
5. The **Base Batch Run Time UOM** field value is non-editable and inherited from the **Process Manufacturing Setup** page.
6. In the **Send-Ahead Batches** field, specify the number of batches you wish to move to the next operation to prevent batch overlap.
   If you select the **Use Batch Run Time** checkbox on the **Routing Line** page or the **Prod. Order Routing** page within the **Released Production Order,** and by clicking **OK** on the **Optimize Batch Size** page, the system automatically performs the following actions,

- The **Run Time** field on the **Prod. Order Routing** page retrieves the value from the **Run Time Per Batch** field on the **Optimize Batch Size** page.
- The **Lot Size** field on the **Prod. Order Routing** page retrieves the value from the **Estimated Quantity** field on the **Optimize Batch Size** page.
- The **Send-Ahead Quantity** field on the **Prod. Order Routing** page retrieves the value by multiplying the values of the **Send-Ahead Batches** field on the **Optimize Batch Size** page and the **Quantity per Batch** field on the **Released Production Order** line.

> **Note**
>
> - You must personalize the **Prod. Order Routing** page within the **Released Production Order** page to add the **Use Batch Run Time** checkbox, **Lot Size,** and **Send-Ahead Quantity** fields. - The **Run Time** field on the **Prod. Order Routing** page is calculated based on the **Unit of Measure Code** field value of its corresponding work center. - To update the run time on the **Released Production Order** page, select the **Use Batch Run Time** checkbox on the **Prod. Order Routing** page within the **Released Production Order**. - Close the **Optimize Batch Size** page and select the **Refresh Production Order** action on the **Released Production Order** page to reset all the optimized batch values of a Production line that were updated from the Optimize Batch Size page.

7. On the action bar, select **Line Components**.
   The **Prod. Order Components** page opens which displays the list of components required to make the main item.
8. The **Input Quantity per Batch** field displays the total quantity (expressed in the Unit of Measure on the component line) of the item on the component line per batch before the production process.
9. The **Input Quantity per Batch (WU)** field displays the total weight (expressed in the Weight Unit of Measure) of the item on the component line per batch before the production process
10. The **Output Quantity per Batch** field displays the total quantity (expressed in the Unit of Measure on the component line) of the item on the component line per batch after the production process.
11. The **Output Quantity per Batch (WU)** field displays the total weight (expressed in the Weight Unit of Measure) of the item on the component line per batch after the production process.
    > [!NOTE]
    > When the batch size increases or decreases, the values in the **Input Quantity per Batch**, **Input Quantity per Batch (WU)**, **Output Quantity per Batch**, and **Output Quantity per Batch (WU)** fields on the **Prod. Order Components** page change accordingly.

Automatic optimization for batch size

You can configure the system to automatically optimize the batch size for production orders and planning worksheets.

Production orders

To use this feature for production orders, ensure the following prerequisites are set:

- Turn on the **Enable Automatic Optimization** toggle on the **Process Manufacturing Setup** page.
- In the **Automatic Opt. Error Handling** field on the **Process Manufacturing Setup** page, select a fallback option for cases where the default optimization method in the production scenario fails.
- Ensure that the relevant location is configured with the default production scenario.
- Ensure the **Automatic Optimization** and **Automatic Run Time Optimization** checkboxes are selected for the default production scenario on the **Item Production Scenarios** page.

For more information, see Set up Process Manufacturing.

The system automatically optimizes batch sizes on the production order using the default production scenario when the production order is refreshed. If the default optimization method fails, the system will either use the *Round using Minimum* method or skip the optimization, depending on the option selected in the **Automatic Opt. Error Handling** field on the **Process Manufacturing Setup** page. Additionally, the system will notify you when it switches to the method selected in the **Automatic Opt. Error Handling** field due to the failure of the default optimization method.

> **Note**
>
> This notification is displayed only when the relevant notification is selected on the **My Notifications** page.

The system applies automatic batch optimization to production orders, even when multiple lines are involved, such as co-products and MTO components. While the system does not optimize each line individually, it adjusts the quantities of these lines based on the batch-optimized quantity of the main production line.

> **Note**
>
> The system performs automatic batch optimization for production orders created directly from sales orders and production orders with source type *Family*. However, it does not support automatic optimization when using the split production order functionality in production orders and production order scheduling.

Planning worksheets

To use this feature for planning worksheets, ensure the following prerequisites are set:

- Turn on the **Enable Optimization in Planning** toggle on the **Process Manufacturing Setup** page.
- In the **Automatic Opt. Error Handling** field on the **Process Manufacturing Setup** page, select a fallback option for cases where the default optimization method in the production scenario fails.

- Ensure that the relevant location is configured with the default production scenario.
- Ensure the **Automatic Optimization** and **Automatic Run Time Optimization** checkboxes are selected for the default production scenario on the **Item Production Scenarios** page.

For more information, see Set up Process Manufacturing.

The system automatically optimizes batch sizes for the planning worksheet lines using the relevant production scenario when executing the **Calculate Regenerative Plan**, **Calculate Net Change Plan**, or **Refresh Planning Line** action on the **Planning Worksheets** page. This automatic optimization only applies to the planning worksheet lines with the **Action Message** field set to *New*.

> **Note**
>
> The system does not support automatic optimization when using the split planning worksheet functionality.

If the default optimization method fails, the system will either use the *Round using Minimum* method or skip the optimization, depending on the option selected in the **Automatic Opt. Error Handling** field on the **Process Manufacturing Setup** page. Additionally, the system will notify you when it switches to the method selected in the **Automatic Opt. Error Handling** field due to the failure of the default optimization method. This notification is displayed only when all the planning worksheet lines are handled as mentioned above and the relevant notification is selected on the **My Notifications** page.

The system applies automatic batch optimization to planning worksheets, even when multiple lines are involved, such as Make-To-Order components. While the system does not optimize the Make-To-Order component lines individually, it adjusts the quantities of these lines based on the batch-optimized quantity of the main production line.

You can also view the increased quantity for batch optimization by selecting the option in the **Warning** field on the **Planning Worksheets** page.

Scenarios when using Batch Sizes

The R&D department of the CRONUS company has defined a recipe for a new item: Tomato Passata. Initially, the item will be sold in a cardboard box containing 6 cans of 233 ML. In a later stage, the same bulk material will also be used in other end products e.g., Tomato Passata 12 cans of 250 ML. The bulk product, however, will always have the same ingredients:

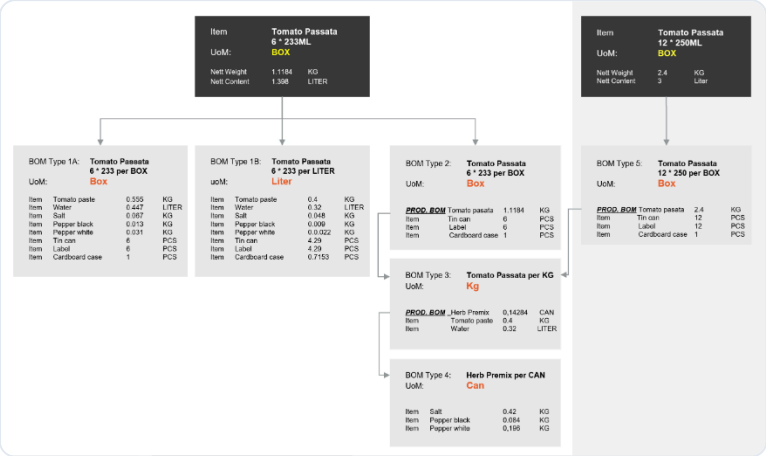
- Tomato paste 48,077%
- Water 42,308%
- Salt 5,7680%
- Pepper Black 1,1540%
- Pepper White 2,6920%

Furthermore, it is known that the required cooking time of 1 hour will result in 10% water evaporation. The CRONUS company has 2 cookers at its disposal, one cooker with a capacity of 50 KG and another with a capacity of 70 KG.

Various approaches can be taken when setting up one or multiple BOMs for this item:

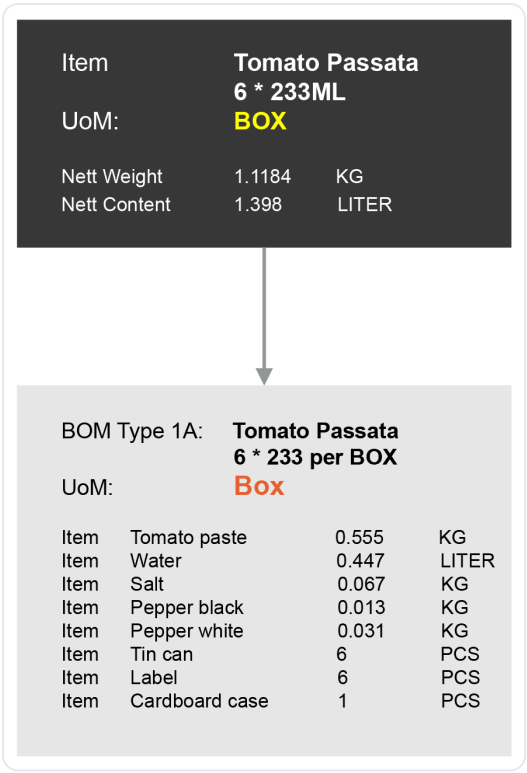
- Scenario 1A: BOM is set up with only items, defined in the Base Unit of Measure of the end product.
- Scenario 1B: BOM is set up with only items, defined in another Unit of Measure (Liter, for example).
- Scenario 2: BOM is set up with both items and a Phantom BOM. The Phantom BOM, which is in turn also set up with items and a Phantom BOM, is being used in multiple end products.

> **Note**
>
> Install the Aptean Production Scenarios extension which allows setting up multiple production scenarios for the same output item.

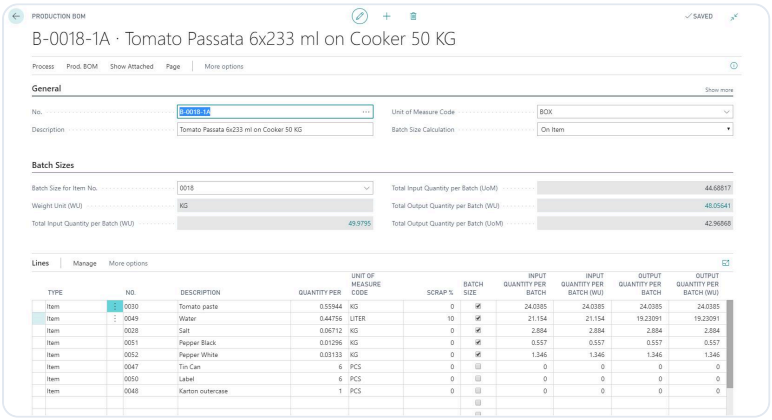


Scenario 1A: Batch Process registration with BOM unit of measure the same as the end product

The BOM in scenario 1A is used for a batch process, therefore Batch size calculation is set to On Item. **The Batch Size for Item No.** field is set to the intended end product, which is in this case item number 0018. All required items are set up in the BOM line. The Batch Size checkbox is selected is activated for the items that are used in the batch process. The tomato paste and water are used in the cooker, but the tin cans are not.



The production BOM of type 1A would be set up as follows:



The capacity of the cooker is divided across the ingredients of the recipe, according to the percentages:

- Tomato paste 50KG * 48.077% = 24.0385 KG
- Water 50KG * 42.308% = 21.154 KG
- Salt 50KG * 5.7680% = 2.884 KG
- Pepper Black 50KG * 1.1540% = 0.557 KG
- Pepper White 50KG * 2.6920% = 1.346 KG

The calculation could be repeated for the 70 KG cooker in a different BOM but linked to the same item number.

The values are entered in the **Input Quantity per batch (WU)** field in the corresponding BOM lines. As opposed to filling out the **Input Quantity per batch (WU)** field, it is also possible to fill out the **Input Quantity per batch** field. This value is always represented in the Unit of Measure of the BOM line. When filled, the system directly recalculates the **Input Quantity per batch (WU)** field. This provides an alternative way of filling the field.

As mentioned, during production there will be a 10% loss of water due to evaporation. This means that there will be a difference between the weight of the batch before and after production. The 10% loss of water is registered as scrap on the BOM line. This causes the **Output Quantity per Batch (WU)** field to be recalculated. This field specifies the total weight (in weight unit of measure) of the item on the BOM line after the production process (in a batch of the finished product).

In this case, the Output Quantity per Batch is calculated by subtracting the scrap from the original input. This is calculated by dividing the original weight of 21.154 KG by 1.1, which results in 19.23091. The Output Quantity per Batch (WU) field is recalculated in the unit of measure of the BOM line itself and shown in the Output Quantity per Batchfield.

After the **Calculate Quantity per** function is executed, the system calculates the **Quantity Per** for each of the BOM lines that have the **Batch Size** checkbox selected. For the first Production BOM line, Tomato Paste, it is calculated as following:

- The Total Batch Weight Output of 49.9795 KG consists of (24.0385 / 48.05641) * 100 = 50.0021% tomato paste.
- Via the Item Unit of Measure table of Item 0018, the weight of one BOX is calculated as 1.118406 KG
- Hence, to create 1 Box, one needs 0.500021 * 1.118406 = 0.55944 KG
- As the unit of measure of the BOM line is also KG, 0.55944 is registered as Quantity Per on the BOM line
- If the unit of measure on the BOM line differs from the weight unit setup (as is the case for water), the weight is calculated back to this specific unit of measure

The above calculation is done for all BOM lines that have the Batch Size checkbox selected.

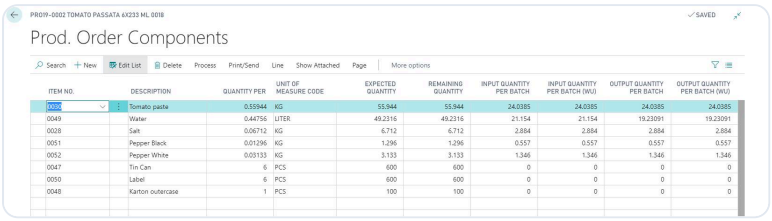
Let's consider we are registering a production order for 100 cartons of item 0018 Tomato Passata, using a BOM as described in scenario 1A:

The production line offers insight into the Total Input Quantity per Batch and the Total Output Quantity per Batch. The Total Input Quantity per Batch specifies the total weight of a batch before the production process, expressed in the Weight Unit of Measure that was set up on the **Process Manufacturing Setup** page. The Total Output Quantity per Batch specifies the total weight of a batch after the production process, expressed in the Weight Unit of Measure that was set up on the **Process Manufacturing Setup** page.

This information can be used to check the weight of all ingredients before the production process and to check the weight of the finished bulk product after production. It is calculated such that, to finish 100 boxes of item 0018, (100

* 1.118406 =) 111.8406 KG Tomato Passata batch product is required. As per batch 48,05641 KG of output is created (Total Output Quantity per Batch WU field) and hence the number of required batches is 111.8406 / 48.05641 = 2.32728. The **No. of Batches Rounded** and **Quantity in No. of Batches Rounded** fields are explained in Working with Batch BOMs in production orders.

Per Component, the following additional fields are available:



The Expected Quantity specifies the total quantity required for the complete production run of 128.906 boxes (Quantity in No. of Batches Rounded), expressed in the Unit of Measure on the BOM line.

The Input Quantity per Batch (UoM) specifies the total quantity (expressed in the Unit of Measure on the component line) of the item on the component line per batch before the production process. This value can be used to check the weight of the ingredient when composing the batch.

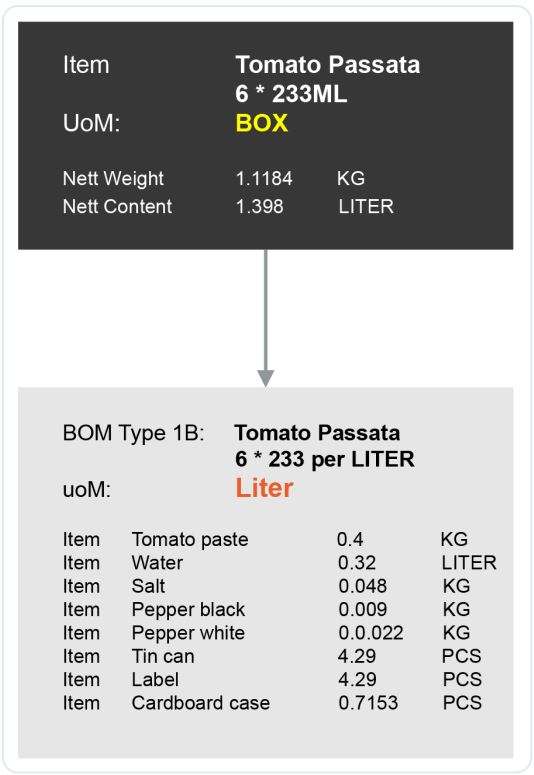
The Input Quantity per Batch (WU) specifies the total weight (expressed in the Weight Unit of Measure) of the item on the component line per batch before the production process. The value can be used to check the weight of the ingredient when composing the batch.

The Output quantity per batch (WU) specifies the total weight (expressed in the Weight Unit of Measure) of the item on the component line per batch after the production process.

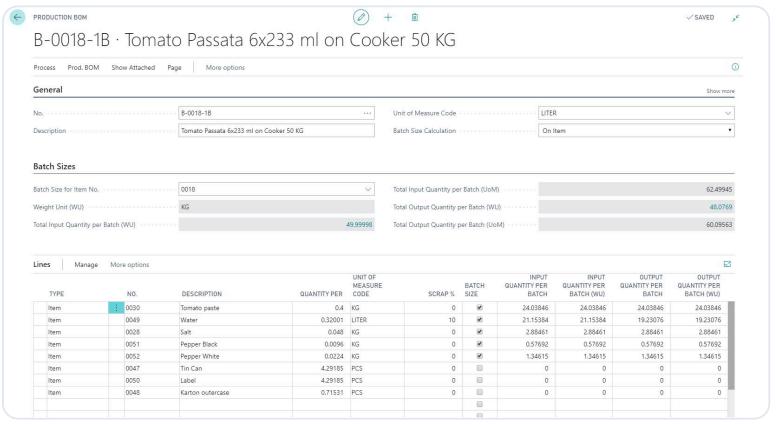
The Output quantity per batch (UoM) specifies the total quantity (expressed in the Unit of Measure on the component line) of the item on the component line per batch after the production process.

Scenario 1B: Batch Process registration with BOM unit of measure different from the End product

To ease production order registration, it is possible to create BOMs in any unit of measure. In our example, for instance, it could be possible to create a Production BOM per liter instead of BOX, as this would be more logical for people working on the shop floor. To offset this against the example discussed in scenario 1A, let's assume that the relationship between KG and Liter for our Tomato Passata item is 1: 0.8 (one liter of Tomato Passata weighs 0.8 KG). In this scenario, the unit of measure of the BOM is KG, which means that the values in the Quantity Per field on the BOM line reflect quantities required to create 1 liter of Tomato Passata.



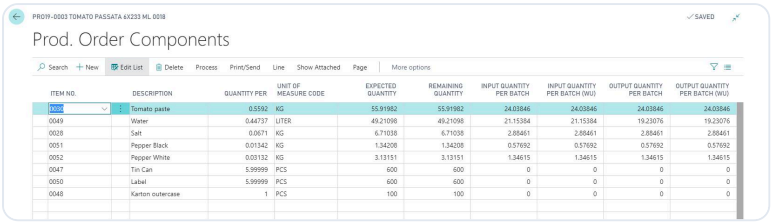
The production BOM of type 1B would be set up as follows:



The distribution of ingredients across the batch is the same as in scenario 1A because the composition of a batch is not different. Tomato paste still has an output of 24,03846 KG and this still is (24,03846 / 48,0769) *100 = 50.002% of the total.

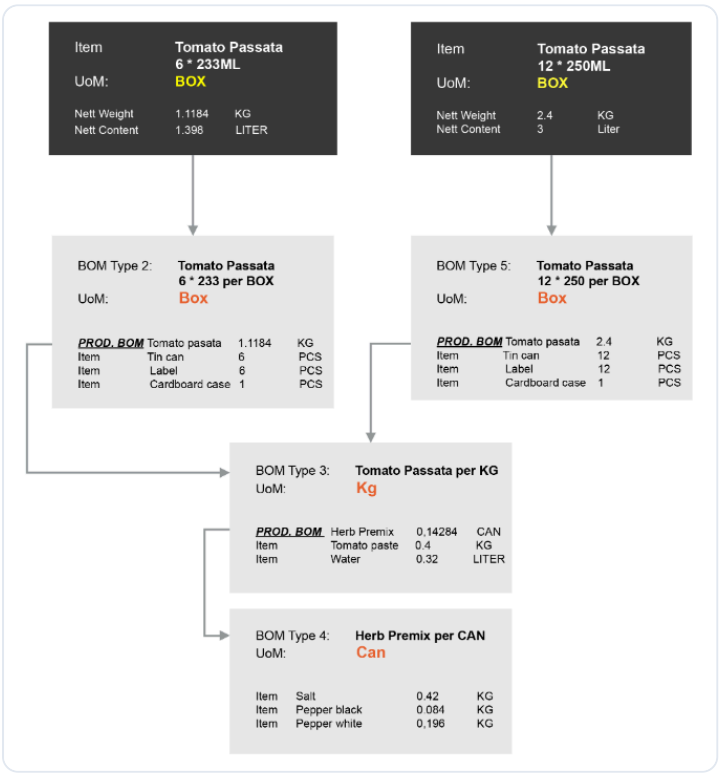
When calculating the Quantity Per for the first line, we are calculating this back to what is required to produce a Liter instead of a Box:

- The relationship between Liter and KG is 0.8.
- Hence, to create one KG of Tomato Passata one would need 50.0021% * 1 = 0.5 KG Tomato paste.
- 0.5 KG tomato paste * 0.8 = 0.4 KG tomato paste is required to create a Liter of Tomato Passata.

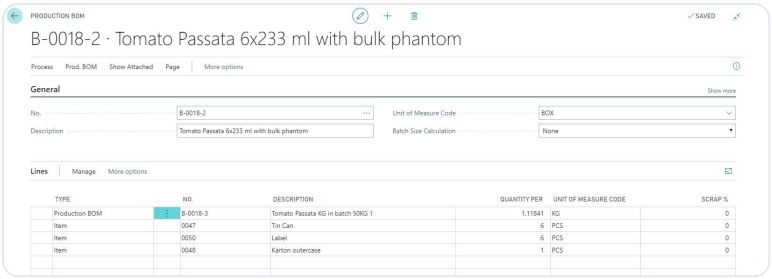


Scenario 2: Batch Process registration using multiple BOMs

In this scenario, so called phantom BOMs are used to streamline the production setup for possible multiple end products, all using the same base product. In our example, we are creating the end product Tomato Passata 6 *233 ML cans and Tomato Passata 12 * 250 ML. Hence, a Phantom BOM was set up that can be used in the BOM of both end products. If the BOM is used as a phantom, it must be taken into account that only an "On Phantom" BOM may be selected in a production BOM line.

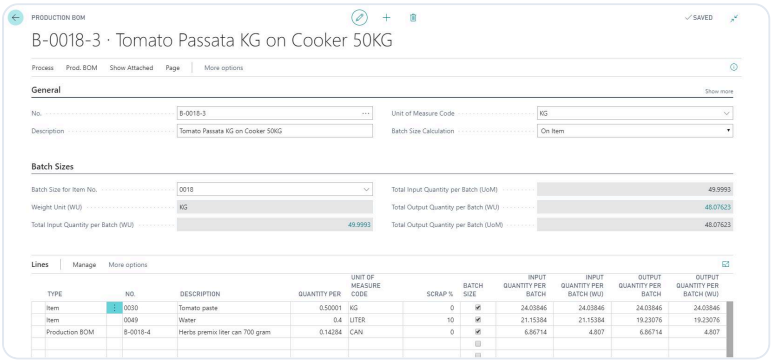


The production BOM of type 2 would be set up as follows:



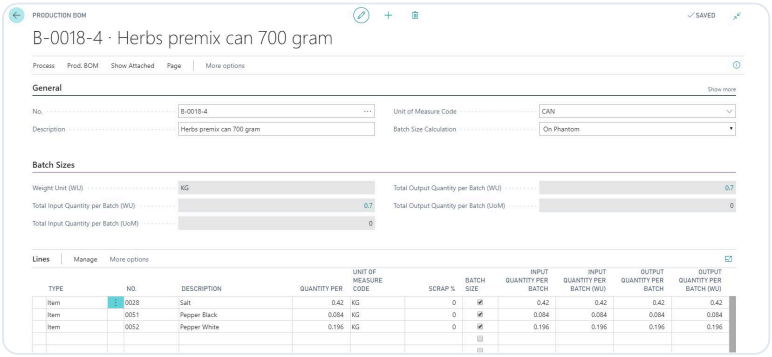
The Batch Size Calculation is set to None. Both items Tomato Passata 8 *233ML and Tomato Passata 12 * 250ML use the same bulk product Tomato Passata, but for different quantities (1.1184 KG versus 2.4 KG). The batch size calculation is set to None on the BOM header since no batch process is registered in the BOM.

Phantom Production of BOM type 3, which is referred to in the BOMs above, has the following setup:



The Batch Size Calculation for this BOM is set to 'On Item', because the batch size data is recorded in this BOM. The Batch Size for Item No. field must be filled, because it is needed to calculate the factor between the weight unit of measure and the BOM header unit of measure. Notice that item 0018 Tomato Passata is linked, even though the BOM is indirectly used for multiple end products. This is no problem assuming the base product used in these items is the same throughout.

Within phantom BOM B-0018-3, another phantom BOM is used: B-0018-4 Herbs premix with CAN as the unit of measure. This BOM of type 4 is set up as follows:

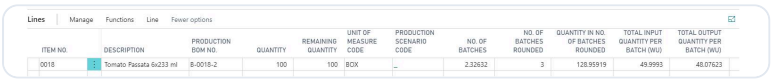


The phantom BOM 'Herbs Premix, B-0018-4' is used in BOM 'Tomato Passata per KG, B-0018-3'. The **Batch Size Calculation** field is therefore set to *On Phantom*. This option is only allowed for BOMs that are used in other BOMs that have Batch Size Calculation set to On Item or On Phantom. Within a hierarchy of BOM levels, you can only place BOMs of Batch Size Calculation = *On Phantom* on BOM lines with Batch Size = *Yes*. You cannot place a BOM of Batch Size Calculation = *On Item* on a production BOM line with Batch Size = *Yes*.

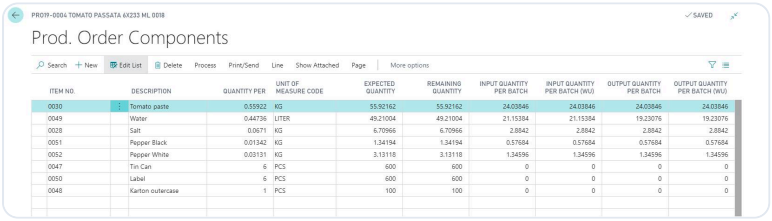
For BOMs where Batch Size Calculation is set to *On Phantom,* the values for Total Input Quantity per Batch (UoM) and Total Output Quantity per Batch (UoM) are left blank since there is no item to fetch the relationship between KG and CAN from. Within the calculation of batch weights on higher levels, the weight of one CAN is based on the **Total Output Quantity per Batch (WU)** field in the BOM header. In the example, the combined weight of the Phantom BOM is set to 0.7 KG for 1 CAN.

To be in line with the original recipe, it is set up that (4,807 / 48,0762) * 100 = 9.99% of the 50 KG Cooker was used for the Herb Mix. Hence to create 1 KG of tomato passata (the unit of measure of BOM B-0018-3), one would need 0,099 KG of Herb mix. As the weight of 1 CAN of Herbs was set in phantom BOM to 0.7 KG, the required quantity of CANS in BOM B-0018-3 is set to 0,099 / 0.7 = 0.14284. This value is calculated automatically when executing the function Calculate Quantity Per on BOM B-0018-3.

The production order line with BOM type 2 is shown as follows:



The production order components with BOM type 2 are shown as follows:



Working with Batch BOMs in production orders

In most production companies, it is a goal to produce as efficiently as possible and therefore manufacture only in full batches. To support this practice, two more fields were added to the production order line:

The No. of Batches Rounded specifies the rounded number of batches that are required to produce the quantity on the production order header, according to the selected BOM and Routing. The Quantity in No. of Batches Rounded specifies the expected output quantity when the quantity in 'No. of Batches Rounded' is used in the production process.

In the example of BOM scenario 2, the production order line has a value of 128.96101 in Quantity in No. of Batches Rounded. Common practice would be to change the output quantity of the production order so that exactly three batches are processed.

1. Change the output quantity to **128.961** on the Production Order header.
2. On the action bar, click **Actions** > **Function** > **Other** > **Refresh Production Order**.
   Refresh the production order without recalculating the lines (to prevent any changes on routing and/or BOM from getting deleted).
3. Turn off the **Lines** toggle.
4. Click **OK**.
5. Change the output quantity on the production order line to 128.961.

In this way, a production order is created in which exactly three batches are processed in an efficient way. When changing the expected output quantity, the required quantities on the component line are directly updated.

Checks when using Batch Sizes

To ensure that the production item structure for batch produced items is set up according to the description in the previous topics, several checks were put in place:

It is not allowed to use a BOM set up with Batch Size Calculation = On Item in another BOM that has this field set up to either *On item* or *On Phantom*.

When releasing a BOM that has Batch Size Calculation set to 'On Phantom', a notification is given if the BOM is also used in other BOM(s) where Batch Size Calculation is different from None. The notification is intended to instruct the user that BOMS on higher levels are to be recalculated (if this is forgotten, the production order will pick up values that are no longer correct when calculating batch sizes).

Besides setting up a scrap % in the BOM line, it is also possible to set up a fixed scrap amount or additional scrap % in the routing line. In a standard production order, the remaining quantity of components is increased with the specific quantity/percentage. Within batch production this is not possible, as the quantity of ingredients is restricted by the size/capacity of the Work- or Machine Center. When selecting a routing in the production order that has such an additional scrap value set up, a notification is given to instruct the user that the specific scrap value is not taken into consideration when calculating the number of required batches.

When using Process Manufacturing within production orders or Production BOMs it is required to set up a Weight Unit on the **Process Manufacturing Setup** page.

When selecting the Batch Size checkbox on the BOM line, it is checked if the item on the production line has a unit of measure set up in the weight unit. This is done to ensure it is always possible to calculate back from any unit of measure to the weight unit of measure.

When assigning a production BOM to the produced item on the Item Card that has Batch Size Calculation set to *On Item*, it is checked if the item number on the Item Card and the item number in the Batch Size for Item No. field in the BOM are equal. If these are not equal, an error message will be shown.

When selecting a production BOM for the produced item on the production order line that has Batch Size Calculation set to 'On Item', it is checked if the item number on the production order line and the item number in the Batch Size for Item No. field in the BOM are equal. If these are not equal, an error message will be shown.

Another check is done only in case the extension Production Scenarios is installed. When selecting a BOM which has Batch Size Calculation set to 'On Item' in the Production Scenarios, it is checked if the item number on the Production Scenarios line and the item number in the Batch Size for Item No. field in the BOM are equal. If these are not equal, an error message will be shown.

When deleting a component line that is part of a batch (according to the BOM) a notification is given that the composition of the batch is no longer aligned with the initial setup of the Batch BOM.

The **Calculation Formula** field that is available on the BOM line cannot be used when Batch Size Calculation is set to *On Item* or *On Phantom*.

Component batch calculator

The **Component Batch Calculator** FactBox displays the entered batch size, the total of batch-managed component quantities, and the remaining balance.

1. Navigate to the relavent **Production BOM** page.
2. You can view the following fields in the **Component Batch Calculator** FactBox:

Field	Description
Batch Size	Specifies the entered **Target Batch Size (UoM)** field value defined on the **Batch Sizes** FastTab.
Batch Size (WU)	Specifies the **Target Batch Size (WU)** field value defined on the **Batch Sizes** FastTab.
Total Input Quantity Per Batch (WU)	Specifies the current sum of the component lines defined on the **Lines** FastTab.
Remaining Balance	Specifies the remaining balance of the BOM, calculated as **Batch Size (WU)** – **Total Input Quantity Per Batch (WU)**.

3. On the action bar, select **Refresh Values** to refresh and update the field values.

> **Note**
>
> If no batch size has been entered on the **Batch Sizes** FastTab, the system displays an error message.

Set up production order routing

Article • 1/24/2024 • 2 min read

Production Order Routing

The **Prod. Routing Zero Run Time** toggle is added to the **Posting** FastTab on the **Work Center** page. This field specifies whether the run time of the resource must be used exclusively for cost roll-up purposes without affecting the overall run time of a production order. Turning on this toggle ensures that the run time of the resources contributes solely to cost calculations and not to the total production order duration.

> **Note**
>
> Click *Show more* on the **Posting** FastTab on the **Work Center** page to be able to view the **Prod. Routing Zero Run Time** toggle.

You can set up the routing with the work center for which the **Prod. Routing Zero Run Time** toggle is turned on.

- When you execute the **Refresh Production Order** action on the **Production Order** page containing the item that is set up with this routing, the **Setup Time**, **Run Time**, **Wait Time**, and **Move Time** fields will be zero and cannot be modified on the **Production Order Routing** line of the work center. The Production Order may be created from a Sales Order, Planning Worksheet, or Change Production Order Status.
- When you execute the **Calculate Regenerative Plan** or **Calculate Net Change Plan** action on the **Planning Worksheet** page containing the item that is set up with this routing, the **Setup Time**, **Run Time**, **Wait Time**, and **Move Time** fields will be zero and cannot be modified on the **Planning Routing Line**. The duration of the production order will not increase.

Open Shop Floor Bin Relations

Article • 1/2/2025 • 4 min read

The bin to be used for production order components can be determined through the **Open Shop Floor Bin Relations** page. The locations must first be set up with bins and then perform the following steps.

1. Select the Search icon , enter **Open Shop Floor Bin Relations**, and then choose the related link.

   The **Open Shop Floor Bin Relations** list page opens.
2. On the action bar, click **New** to create a new line.
3. Fill in the following fields:

Field	Description
Location Code	Enter the code for the location involved in the selected open shop floor bin relation.
Type	Choose the type of resource involved in the selected open shop floor bin relation. The available options are the Work Center and Machine Center.
No.	Enter the number assigned to the work or machine center involved in the selected open shop floor bin relation.
Component Type	Choose the type of component involved in the selected open shop floor bin relation. The available options are Item and Item Category.
Component Type No.	Enter or choose the item number or item category code of the component involved in the selected open shop floor bin relation.
Variant Code	Choose the variant code of the component involved in the selected open shop floor bin relation. It is applicable only when the Component Type is an Item.
Open Shop Floor Bin Code	Enter or choose the bin code from the open shop floor to be applied to the backflushed component line. This is filtered based on the selected Location Code.

1. On the action bar, click the **Edit List** action to edit an existing line or the **Delete** action to delete a line.

This configuration can be used in the following ways:

- On the **Released Production Order** page, select **Actions** > **Functions** > **Other** > **Refresh Production Order** on the action bar to update the bin code for production order components based on the configuration on the **Open Shop Floor Bin Relations** page.

- On the **Planning Worksheets** page, select **Home** > **Carry Out Action Message** or **Refresh Planning Line** on the action bar to update the bin code for components of the planning worksheet lines based on the configuration on the **Open Shop Floor Bin Relations** page. You can view the updated bin code on the relevant **Planning Components** page by selecting **Line** > **Components** on the action bar.

The following hierarchy is followed while choosing the **Open Shop Floor Bin Code**. On the **Open Shop Floor Bin Relations** page, the line in which

1. All fields are filled in.
2. All fields are filled in except the **Variant Code**.
3. All fields are filled in, and the **Component Type** is set as *Item category*.

> **Note**
>
> **Variant Code** will always be blank for *Item Category*.

1. All fields are filled in except **Type** and **No.**
2. All fields are filled in except **Type**, **No.**, and **Variant Code**.
3. All fields are filled in except **Type** and **No.**, and the **Component Type** is set as *Item Category*.

If the **Open Shop Floor Bin Relations** page is not configured, the **Refresh Production Order** action on the **Released Production Order** page and the **Carry Out Action Message** or **Refresh Planning Line** on the **Planning Worksheets** page will perform their default functionality.

Weight and Yield Percentage

Article • 3/26/2025 • 8 min read

The total weight of the Production BOM (expressed in the setup Weight Unit and based on the unit of measure registered on the Production BOM) can be calculated on the header of the **Production BOM** page.

To do this, the following calculations are made at the Production BOM line level:

- The type of weight that is taken into consideration (net weight or gross weight).
- The weight represented by the specific BOM line level before the production process (identified as the Input Quantity per WU) is expressed in the unit of measure of the Production BOM line.
- The weight represented by the specific BOM line level after the production process (identified as the Output Quantity per WU) is expressed in the unit of measure of the Production BOM line.

These fields will be summarized on the Production BOM header level to give insight into the total net- and gross weight of one produced unit (in the unit of measure of the Production BOM). Also, from these figures, the Yield% is calculated.

Weight and Yield Setup

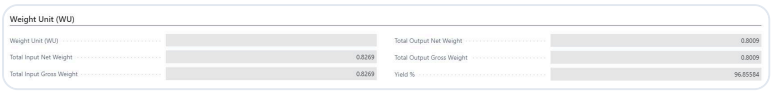
1. Navigate to the desired **Production BOM** page.
2. On the **Lines** FastTab, in the **Weight Calculation Type** field, select *Net Weight*.
   The options in the **Weight Calculation Type** field are *Net weight*, *Gross Weight*, and *BOM Weight*.
3. On the **Production BOM** page, on the action bar, select **Actions** > **Other** > **Calculate Weight and Yield**.

The action has calculated the weight for the production BOM lines for which the **Weight Calculation Type** field has been filled as follows:

- In each production BOM line, the **Input Quantity per (WU)** field unit specifies the weight represented by the specific BOM line before the production process has taken place, expressed in the Unit of Measure of the Production BOM line.
- In each production BOM line, the **Output Quantity per (WU)** field specifies the weight represented by the specific BOM line level after the production process has taken place, expressed in the Unit of Measure of the Production BOM line.

> **Note**
>
> When the **Dynamic BOM Line Weight Calculations** toggle on the **Process Manufacturing Setup** page is turned on, the system automatically calculates input and output weight field values. For more information, see Process weight change percentage on production BOM lines.

The action has calculated the Weight and Yield for the **Production BOM** header as follows:



- The **Total Input Net Weight** field specifies the sum of the value of the **Input Quantity per (WU)** field of all Production BOM lines where Weight Calculation Type = Net Weight.
- The **Total Input Gross Weight** field specifies the sum value of the **Input Quantity per (WU)** field of all Production BOM lines where Weight Calculation Type = Net Weight or Gross Weight.
- The **Total Output Net Weight** field specifies the sum value of the **Output Quantity per (WU)** field of all Production BOM lines where Weight Calculation Type = Net Weight.
- The **Total Output Gross Weight** field specifies the sum value of the **Output Quantity per (WU)** field of all Production BOM lines where Weight Calculation Type = Net Weight or Gross Weight.
- The **Yield %** field specifies the yield percentage, which is calculated by dividing the value of **Total Output Net Weight** by the value of **Total Input Net Weight** on the Production BOM header.

The Weight and Yield% are also automatically calculated upon certifying the BOM.

Weight Calculation Type

The **Weight Calculation Type** field is updated with the option based on the selection of Production BOM **Type** on the **Lines** FastTab of the **Production BOM** page. The line type of the Production BOM can be *Item* or *Production BOM*.

1. When the **Type** field is selected as *Item*, the **Weight Calculation Type** field is inherited with the value from the **Default Weight Calculation Type** field on the **Item Card** page.
   a. Navigate to the desired **Item Card** page.
   b. On the **Replenishment** FastTab, in the **Default Weight Calculation Type** field, select an option from the dropdown.
   This value is inherited in the **Weight Calculation Type** field on the **Lines** FastTab of the **Production BOM** page, when the item is selected on the **Type** field.

2. When the line is set up with the type *Production BOM*, the weight calculation type is automatically set to *BOM Weight*, indicating that the weight calculation types of the underlying BOM lines should be used to determine in what category they fall.
   You can change the **Weight Calculation Type** field value manually when required.

Process weight change percentage on production BOM lines

On the **Production BOM** page, on the **Lines** FastTab, the **Process Weight Change** % field specifies the percentage of weight lost or gained for a component during manufacturing. This value impacts the following fields:

- The **Output Quantity per (WU)** field for lines with the **Batch Size** checkbox cleared.
- The **Output Quantity per Batch** and **Output Quantity per Batch (WU)** fields for lines with the **Batch Size** checkbox selected.

The calculation method depends on the configuration of the **Dynamic BOM Line Weight Calculations** toggle on the **Process Manufacturing Setup** page.

The **Output Quantity Per Batch** and **Output Quantity Per Batch (WU)** field values are more precise due to enhanced rounding calculations.

> **Note**
>
> These values are rounded to five decimal places on the **Production BOM** page for improved accuracy.

When this toggle is turned on, and the **Weight Calculation Type** field on the production BOM line is set to *Net Weight* or *Gross Weight*, the system dynamically calculates and updates the following fields:

Input Quantity Per (WU)

The **Input Quantity Per (WU)** field value is calculated based on the values in the **Quantity Per WU** and **Scrap** % fields.

Input Quantity Per (WU) = Quantity Per WU + (Scrap % x 0.01 x Quantity Per WU)

For batch size lines, if the **Input Quantity per Batch** or **Input Quantity per Batch (WU)** field value is modified, the **Input Quantity per (WU)** field value is reset to *0* and only updates after executing the **Calculate Quantity per** action.

Output Quantity Per (WU)

The **Output Quantity Per (WU)** field value is calculated based on the values in the **Quantity Per WU** and **Process Weight Change** % fields.

Output Quantity Per (WU) = Quantity Per WU + (Process Weight Change % x 0.01 x Quantity Per WU)

For batch size lines, if the **Output Quantity per Batch** or **Output Quantity per Batch (WU)** field value is modified, the **Output Quantity per (WU)** field value is reset to *0* and only updates after executing the **Calculate Quantity per** action.

Process Weight Change %

The **Process Weight Change** % field value is calculated based on the values in the **Quantity Per** and **Output Quantity per (WU)** fields.

Process Weight Change % = [Quantity Per x (GetFactorUOMWeightUom – Output Quantity per WU)/ (0.01 x Quantity Per x GetFactorUOMWeightUom)] x -1

The GetFactorUOMWeightUom value is calculated by dividing the **Qty. per Unit of Measure** field value for the item's base unit of measure by the **Qty. per Unit of Measure** field value for the item's unit of measure specified in the **Weight Unit (WU)** field on the **Process Manufacturing Setup** page.

> **Note**
>
> The changes to these fields will also dynamically update the related fields based on the calculations.

Changes to Yield % field on the production BOM line

The **Yield** % field on the production BOM line has been replaced with the **Process Weight Change** % field in the Aptean Process Manufacturing, version 2412.0.0.0. The existing records with the **Yield** % field values are converted using the formula:

Process Weight Change % = Yield % - 100

For example, if Yield % = 80, then Process Weight Change % = 80 – 100 = -20.

> **Note**
>
> If the **Yield** % field value is 0, the system directly updates the **Process Weight Change** % field to 0 without using the formula.

Backflush on Lot-tracked items

Article • 12/26/2023 • 6 min read

Materials and components that must be consumed during production can be set up with a backward flushing method. The standard backflush functionality is extended to automatically calculate, and post lot tracked items when using the backward flushing method. The standard behavior requires that the user manually assigns a lot number in the item tracking lines of the production component line prior to changing the status to *Finished*. With this extra functionality, the assignment of item tracking lines is done automatically when the status of a released production order is changed to Finished. Lot numbers will also be automatically assigned to component items when routing link codes are defined because the calculation and posting of component consumption occur when each operation is finished instead of completing the production order.

The finished quantity of the production order line dictates the quantity that needs to be assigned in the item tracking line(s) for the consumption journal lines. The total quantity of all item tracking lines that are automatically created for a consumption journal line adds up to the result of the finished quantity (of the prod. order line) multiplied by the Quantity Per of the associated production component line.

There is a distinction between lot numbers that are created with and without an expiration date. When this expiration date has been assigned, the lot numbers with the earliest expiration date (with a remaining quantity) will be assigned in the item tracking lines. This method follows the FEFO (First Expired, First Out) principle. However, lot numbers without an expiration date will be assigned based on FIFO (First In, First Out). This means that item ledger entry (with a remaining quantity) with the lowest Entry No. will be assigned first.

Backflush on Lot number setup

1. Select the Search icon  , enter **Process Manufacturing Setup** and then choose the related link.
   The **Process Manufacturing Setup** page opens.
2. Turn on the **Backflush on Lot Number** toggle.

This specifies if lot numbers are automatically assigned for consumption items that are set up with the backward flushing method.

Exceptions during auto-assignment of Lot numbers

The following exceptions are considered when automatically back flushing lot tracked component items:

- If the Item Tracking code used by the component item is set with Strict Expiration Posting = Yes, then expired lot numbers are skipped when assigning the lot numbers in the automatically assigned item tracking lines.
- If the Aptean Inspection Status extension has been installed and a lot number has an Inspection Status assigned with the setting Production Consumption Pick = Yes and/or Production Consumption Availability = Yes, then the

lot number is skipped when assigning the lot numbers in the automatically assigned item tracking lines.

- If the lot number information card has the setting Blocked = Yes, the lot number is skipped when assigning the lot numbers in the automatically assigned item tracking lines.
- While assigning item tracking lines to the production component lines, if there isn't enough inventory available, then an error is shown that there is insufficient inventory. This can, for example, be caused by an existing reservation for the item that must be back flushed.
- If the item tracking lines are already assigned to the associated production component line (for example because they are manually assigned) then the auto-assignment of these item tracking lines will be skipped. If the total quantity of the manually assigned item tracking lines is insufficient, an error message will be shown.
- If the lot number is already assigned in the item tracking lines to be used in another document, these quantities are taken into consideration when assigning the lot number during the backward flushing. The lot numbers and quantities that are placed in an inventory pick and/or warehouse pick are not considered in the calculation. Only the quantities that have been separated from the available stock by assigning them in the item tracking lines are considered.

> **Note**
>
> If you also use the Aptean Food and Beverage License Plating extension, when changing the status of Released Production Order to Finished Production Order, on the **Released Production Order** page, the backflush functionality automatically assigns the lot numbers and license plates belonging to the lot numbers in the item tracking lines to the finished production order.

> If the license plate card has the setting Blocked = Yes, then the license plate number is skipped when assigning the finished production order with the lot number and license plate number in the automatically assigned item tracking lines.

- In case of an empty Bin Code (and possibly an empty Location Code) in the Prod. Order Component line, the functionality will look for an inventory that is stocked without a Bin Code (and possibly without Location Code) to backflush lot tracked consumption items.
- In case of warehouse entries that are created without a lot number (which can be caused when an item is set up with an Item Tracking Code without the setting 'Lot Warehouse Tracking' turned on), the assignment of lot numbers during the backward flushing will not consider the Bin Code that's mentioned on the Prod. Order Component line as a filter when assigning a lot number. For proper working one should use an Item Tracking code with this setting turned on.

Consolidated Pick and Consolidated Consumption

Article • 9/16/2025 • 58 min read

Two processes have been added in the extension to consolidate the pick and consumption of production consumption.

The consolidated pick makes it possible to create a movement of selected component items from multiple production orders in one go. With consolidated picking, the user can consolidate production orders and do the consumption picking as one trip through the warehouse instead of picking consumption items for each production order. It must be indicated per item/stock keeping unit whether a consolidated pick from the warehouse bin to the production bin is enabled.

The process of consolidating (grouping) production component lines into one consolidated pick gives the possibility to simplify the picking of goods and perform picking in an efficient way. This is achieved by consolidating several consumption items, within the same warehouse, to be picked together

When using the consolidated pick method, it is necessary to use the consolidated production movement to move items from the warehouse to the production area, as the other functions that can be used in a released production order to move items will skip items that are set up with a consolidated pick method.

This method makes the warehouse employee responsible for correct consumption posting because they need to make sure that at the end of a shift or at the end of a day, the items that are still physically available in the production bin are moved back to the warehouse.

On the other hand, consolidated consumption posting can be useful in hectic production environments where there is no time for shop floor operators to manually post consumption. So a consolidated consumption posting routine is required.

Through consolidated consumption posting, the total bin content of the bin code used in selected production component lines is assigned pro rata to these lines and posted as consumption.

Set up consolidated pick and consolidated consumption

The setup for Consolidated Pick and Consumption exists of the following topics:

- Process Manufacturing Setup
- Item card
- Shop calendar working day

Process manufacturing setup

The Process Manufacturing Setup contains the setup regarding the journal template used during the consolidated consumption and the warehouse worksheet regarding consolidated picking on a WMS location.

1. Select the Search icon  , enter **Process Manufacturing Setup** and then choose the related link.
   The **Process Manufacturing Setup** page opens.
2. In the **Consolidated Consumption Journal Template** field, select an Item Journal Template from the dropdown menu.
   In the **Consolidated Pick Whse. Worksheet Template** field, select a warehouse worksheet template.
3. In the **Scrap Inclusion Mode** field, select whether the **Scrap %** field value should be included in the calculation of the **Output Quantity per Batch** and **Output Quantity per Batch (WU)** field on the **Production BOM** page. The available options are: *Exclude* and *Include*.

Item card

It must be indicated per item/stock keeping unit whether consolidated consumption picking and posting is enabled.

1. Select the Search icon  , enter **Items** and then choose the related link.
   The **Items** list page opens.
2. Select the required **No.**
   The **Item Card** page opens.
3. On the **Replenishment** FastTab, in the **Component Pick Method** field, select *Consolidated*.

> **Note**
>
> You can also use the Catch Weight Item in Consolidated Pick on integration of the Aptean Process Manufacturing extension with the Aptean Catch Weight extension. To know more, see here.

With consolidated component picking, it is possible to consolidate several consumption items for multiple production orders, within the same warehouse, to be picked together. The field can be filled with Consolidated when the **Flushing Method** field is either *Manual* or *Backward*. When the Flushing method is set to *Backward*, then the **Consolidated Consumption** toggle cannot be turned on. When setting the Component Pick Method to Consolidated, it is advised to use an Item Tracking Code for the item with the Lot Warehouse Tracking toggle enabled. This will make sure that the bin codes will be considered when calculating the available inventory when the consolidated pick takes place.

4. Turn on the **Consolidated Consumption** toggle to specify that a consolidated consumption posting routine is required. Through consolidated consumption posting, the total bin content of the bin code used in the production component line is assigned pro-rata to these lines and posted as consumption. The toggle can only be enabled when the **Component Pick Method** field is set up with *Consolidated*.
   Alternatively, these fields can also be set up on the **Stockkeeping Unit Card** page.
5. Turn on the **Use Open Shop Floor Bin** toggle to assign the **Open Shop Floor Bin Code** from the Work Center/Machine Center associated with the routing line to the bin code of the production order component line.
   Alternatively, this field can also be set up on the **Stockkeeping Unit Card** page.
   When a new Stockkeeping Unit is created for an item, the **Use Open Shop Floor Bin** toggle within the **Stockkeeping Unit Card** page is automatically set with the same value as the selected item.
   If the routing line is linked with the component line using the **Routing Link Code** field value, the component line's bin code is inherited from the **Open Shop Floor Bin Code** of Prod. Order Routing Line.
   If the **Routing Link Code** is empty in the component line, the bin code is inherited from the **Open Shop Floor Bin Code** from the first Work Center/Machine Center of the Prod. Order Routing line.
   When the **Open Shop Floor Bin Code** field is empty in the Prod. Order Routing line, the following information will be inherited to the bin code field of the component line.

Page	Field	Is blank	Bin code inherited from
Prod. Order Routing	**Open Shop Floor Bin Code**	✓	The Open Shop Floor Bin Code from the Location Card page.
Location Card	**Open Shop Floor Bin Code**	✓	The To-Production Bin Code from the Prod. Order Routing.
Prod. Order Routing	**To-Production Bin Code**	✓	The To-Production Bin Code from the Location Card page.

> **Note**
>
> When no Prod. Order Routing lines are found, and then the bin code is inherited from the **Open Shop Floor Bin Code** associated with the selected location. If it is blank, then the bin code is inherited from the **To-Production Bin Code**.
> The system automatically inherits the **Use Open Shop Floor Bin**, **Component Pick Method**, **Consolidate Consumption**, and **Default Weight Calculation Type** field values on the **Item Template** page field values are inherited from the associated fields on the **Item Card** page. Additionally, you can manually select the field values.

Shop calendar working day

To split the inventory that will be used as consolidated consumption for the production orders that belong to a specific work shift, the assigned suffix is added to the bin code in the production order component line when it's

used for consolidated consumption posting. The suffix is assigned when the shop calendar working day applies to the first routing line of a production order.

1. Select the Search icon  , enter **Shop Calendars** and then choose the related link.
   The **Shop Calendars** page opens.
2. Navigate to the required calendar.
3. On the action bar, select **More options** > **Related** > **Shop Cal.** > **Working Days**.
4. In the **Bin Suffix Consolidated Consumption** field, enter the value. When filling in this field, keep in mind that the bin code, including the bin suffix, can only contain 20 characters. When the setting Consolidated Consumption is enabled on the production order component line, the Bin Code will be replaced with the initial value + the Bin Suffix of the associated Shop Calendar Working Day line.

Enhancements on production order

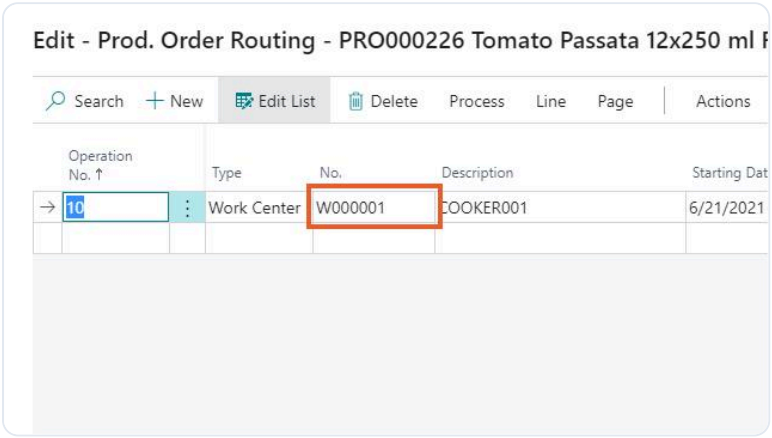
When refreshing the consumption lines of a production order or manually entering a production component line, the value of the **Component Pick Method** and **Consolidated Consumption** fields are inherited from the associated stockkeeping unit (SKU)- or item card of the component item to the production order component line. A distinction is therefore made on the production order component lines between consumption items that should or should not be placed in a consolidated pick/consumption.

Also, when refreshing the routing lines of a production order, the **Work Shift Code** field is filled on the production order. The work shift code is retrieved by checking the shop calendar working day that is associated with the routing line. The Shop Calendar is selected on the Work Center/ Machine Center card of the first Production Routing line. To decide which work shift code of this shop calendar applies, it is checked which starting date/ time of the first production routing line falls between the Starting time and Ending time of the Shop Calendar Working Day.

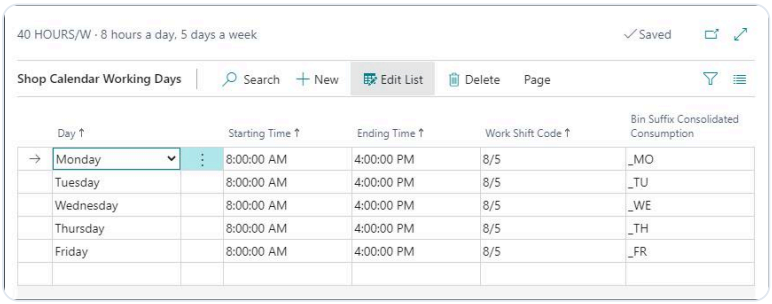
1. Select the Search icon  , enter **Released Production Orders** and then choose the related link.
   The **Released Production Orders** list page opens.
2. Select the required **No.**
   The **Released Production Order** page opens.
3. On the **General** FastTab, the **Work Shift Code** field is automatically filled on the production order header when creating the production routing lines of a production order. This field specifies the work shift that this production order refers to.
   The Work Shift Code is retrieved by checking the associated Shop Calendar Working Day line. The associated Shop Calendar Working Day line is the line that is linked to the Shop Calendar set up on the Work Center/ Machine Center of the first Production Routing line. The starting date/ time of this first production routing line must fall between the Starting time and Ending time of the Shop Calendar Working Day.
   If the ending date-time of the first production order routing line falls after the end time of the corresponding shop calendar workday, the **Exceeds Shop Calendar Working Day** field on the production header is

automatically enabled.
It is not possible to assign a Shop Calendar Code to a Machine Center. In such a case, the shop calendar of the work center linked to the machine center is used.
This work shift code will be captured in the item ledger entries that are created as a result of an output posting.
The Work Shift Code can be changed manually, except when the Status of the Production Order is Finished.
When changing the dates on the production line, production header or in the first production order routing line, the work shift code is changed accordingly as well.

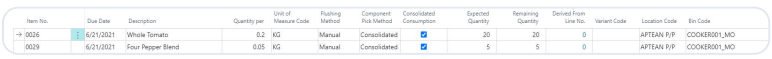
4. On the **Lines** FastTab, on the action bar, select **Line** > **Routing**.
   The **Prod. Order Routing** page opens.
   On the Routing Lines page, the first routing line is assigned with Work Center **W000001**. This determines which Bin Suffix will be added to the production component lines that must be consumed in a consolidated manner.



   The Shop Calendar Code for the work center **W000001** is assigned **40 HOURS/W**.
   On the Shop Calendar Working Days page for 40 HOURS/W, the Bin Suffixes are assigned with an abbreviation of the particular day.



5. Select Close.
6. On the **Lines** FastTab, on the action bar, select **Line** > **Components**.
   The Prod. Order Components page opens.



Both the **Component Pick Method** and **Consolidated Consumption** fields are copied from the production order component line of the item card.

The Bin Codes with the Consolidated Consumption setting enabled are replaced with the composed Bin Code equal to the initial value + the Bin Suffix of the associated Shop Calendar Working Day line. The Bin Code has changed to COOKER001, as this is the To-Production Bin Code set up on the Work Center, and it now also includes the Bin Suffix of the starting day, Monday, so it results in COOKER001_MO.

Integration with shop floor logistics

The Aptean Process Manufacturing extension is integrated with the Aptean Shop Floor Logistics extension. The **Shop Floor Activities** page from this extension supports the planning in the warehouse and it shows an overview of all outstanding warehouse activities. The consumption of a released production order can contain an outstanding warehouse activity. However, when the released production order only contains prod. component lines that must to be picked in a consolidated manner, this warehouse request won't be shown on the **Shop Floor Activities** Page as the consumption should be handled with a consolidated pick instead.

Add component items to the line

The component items (with Make-To-Order as Manufacturing Policy) that are linked to the main items (with Make-To-Stock as Manufacturing Policy) are added as secondary lines to a production order as well as on the planning worksheet. When the component items are added to the production order or planning worksheet, the quantity of the component items will be reflective of their demand requirement to the main item with which it is associated.

Pre-requisites

- On the **Process Manufacturing Setup** page, the **MTO Production Depends Only on Components** toggle should be enabled.
- On the **Item Card** page, the **Manufacturing Policy** field should be set to

    1. **Make-To-Stock** for the main item.
    2. **Make-To-Order** for the component items.

- On the **Item Card** page, the **Replenishment System** field should read **Prod. Order** for both main and component items.

To add the component items to the production order line

1. Select the Search icon  , enter **Released Production Orders**, and then choose the related link.
   The **Released Production Orders** list page opens.

2. On the action bar, select **New**.
   The **Released Production Order** page opens.
3. On the **General** FastTab,
   - In the **Source Type** field, select the **Item** from the options.
   - In the **Source No.** field, select the desired **No.**
   - In the **Quantity** field, enter the value of the quantity.
4. On the action bar, select **Process** > **Refresh Production Order**.
5. Select **OK**.

You can now see the component items appear as secondary lines on the production order.

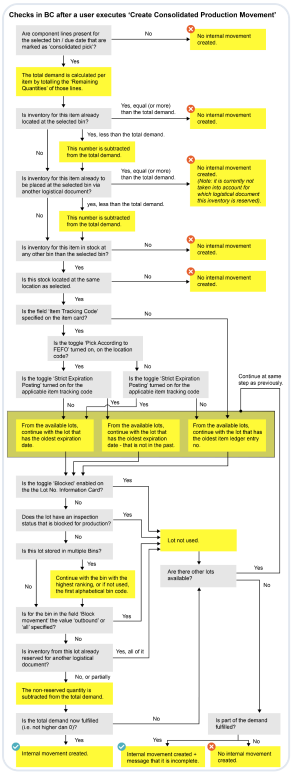
To add the component items to the planning worksheet line

1. Select the Search icon , enter **Planning Worksheets**, and then choose the related link.
   The **Planning Worksheets** page opens.
2. On the action bar, select **More options** > **Actions** > **Functions** and then choose any of the following actions.
   - **Calculate Net Change Plan**
   - **Other** > **Calculate Regenerative Plan**
3. Choose the appropriate parameters on the above pages to calculate the demand.
4. Select **OK**.

> **Note**
>
> The main items are filtered along with the component items in the planning worksheet line based on the filters you choose on the above respective pages.

Consolidated pick

First, the consolidated pick is used to move the items from the warehouse to the production bin. The image below shows schematically how the demanded inventory and available inventory will be calculated. The explanation is given in detail in the image below.



For the production order component lines that are marked to place in a consolidated pick (which is the case when the field Component Pick Method = Consolidated), the total needed inventory (demand) is calculated by totaling the Remaining Qty. (Base) of the filtered Prod. Order Component lines per item number/variant code. The production order component lines will be filtered with the values entered by the user: Location/ Bin code until a selected due date/ time of all Prod. Order Component lines.

If inventory needs to be moved to the selected bin, it will be checked if the selected location contains enough available inventory. This will be reduced from the amount of inventory that needs to be moved to the requested bin.

It is also checked whether the available inventory will already be increased by other logistical documents that 'places' the demanded item/variant on the requested Location Code/Bin Code. This can for example occur when an inventory movement already exists and will place the item/variant in the requested Bin Code. This reduces the amount of inventory that needs to be moved to the requested Bin Code.

It could be the case that there is no needed inventory (demand). This can be caused when no production component lines are present for the selected Bin/Due date, the selected bin already contains enough inventory to fulfil the remaining quantities of the consumption items, or enough inventory will be placed in the requested bin due to warehouse activities.

When the inventory shortage for the Item/Variant/Bin code-combination is calculated, the next step is to calculate which lot numbers on the requested location code could be used to fulfil the needed inventory. For Lot tracked items, the FEFO principle is applied. The bin where the first to expire lot is stored will be used to take items from. If this first to expire lot is stored in multiple bins, then the bin with the highest bin ranking is used. If bin ranking isn't used, then the first alphabetical bin code is used applying sorting to the bin codes.

The following situations will exclude inventory from available stock:

- The Lot No. Information Card has the setting Blocked enabled.
- The Expiration date has passed. This is only considered when the Item Tracking Code assigned to the item, is set up with the setting Strict Expiration Posting enabled.
- If the Inspection Status of the lot number is blocked for Production Consumption Pick and/or Production Consumption Availability
- Bin Codes that are set up with Block Movement = Outbound or All cannot be used to take items from.

Each time a suitable lot number is found, it is checked whether any logistical document is already reserving inventory from this lot number and the bin code. This can be, for example, an inventory- or warehouse pick created for a sales order. This reserved quantity will therefore not be taken into account when creating the consolidated pick. Depending on the selected setting in the **Create Consolidated Production Movement** function, an internal movement will be created that contains the bin codes where the suitable lot numbers with corresponding quantities are stored. If the setting is enabled to automatically create an inventory movement, and the location has the setting enabled to pick according to FEFO, the suitable lot numbers are automatically selected in the document as well.

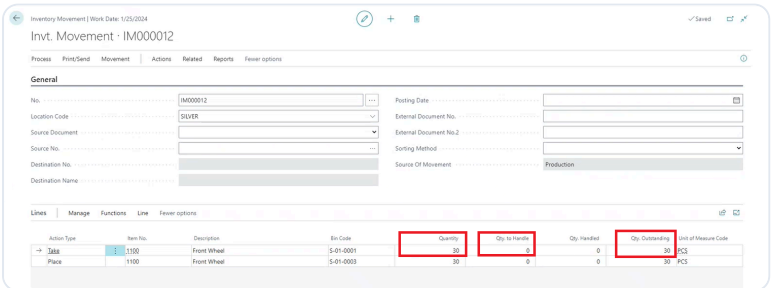
The Create Consolidated Production Movement functionality also helps you over-pick more than the outstanding quantity in an inventory movement. When the shipping container/pallet load is higher than the requested quantity, the entire container/pallet will be moved to the production bin.

Using this functionality, you can increase the quantity you want to handle in an inventory movement, even if it is more than the outstanding quantity. When you increase the quantity to handle, the total and outstanding quantities will also increase accordingly.

For example,

On the **Inventory Movement** page, the inventory movement line is filled with the following values:

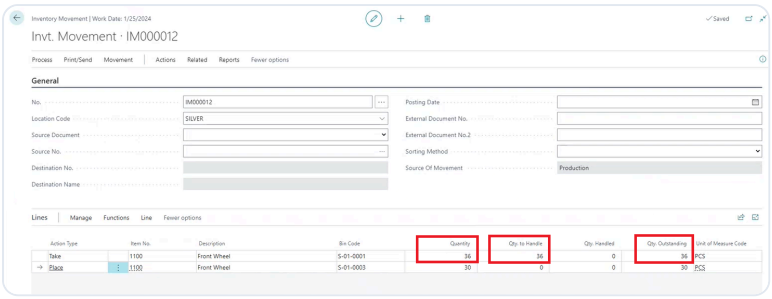
- **Quantity** = 30
- **Qty. to Handle** = 0
- **Qty. Outstanding** = 30



When you enter a value greater than the outstanding quantity in the **Qty. to Handle** field, the values in the **Quantity** and **Qty. Outstanding** fields will change accordingly.

- **Quantity** = 36

- **Qty. to Handle** = 36
- **Qty. Outstanding** = 36



> **Note**
>
> The quantity will be adjusted only on the specific line for which you are changing the value.

It could be the case that there is no available inventory. This can be caused by the following situations:

- No inventory at all exists for the item in the selected location.
- Inventory exists for the item, but it's not useable (for example, due to a blocked lot number information card).
- The existing inventory is already totally reserved in warehouse activity lines.

The function creates an Internal Movement for P/P and WM locations, and it fills the Movement Worksheet for WMS locations.

The **Create Consolidated Production Movement** report is designed for use in any material requisition process, not only for production order component lines marked as *Consolidated* in the **Component Pick Method** field. You can apply filters on the report request page, such as location, bin, due date, or pick method, to include only the relevant component lines in the inventory demand calculation.

It is important to configure these filters carefully to ensure that the correct inventory requirements are calculated. While filtering by bin code is mandatory, other filters such as pick method or consumption method can be used to further narrow down which production order components are included. You can consider the specific requirements of the inventory processes when applying these filters.

To generate this report, follow these steps:

1. Select the Search icon , enter **Create Consolidated Production Movement** and then choose the related link.
   The **Create Consolidated Production Movement** page opens.
2. In the **Location Code** field, select the required code.
3. In the **To Bin Code** field, select the AssistEdit button to select the required code.

> **Note**
>
> This field is editable only when the **Use Prod. Order Component Bin Code** toggle is turned off.

1. Select **OK**.
2. Turn on the **Use Prod. Order Component Bin Code** toggle to transfer the inventories to the bin code that is assigned to the production order component lines.

   When this toggle is turned on, only one internal movement is created for all the relevant released production orders based on the selected location code.

> **Note**
>
> You can turn on the **Ignore Zone Filter** toggle to allow the system to search for available inventory across different zones within the same location.
> If the toggle is turned on, the system will take inventory from any available bin from other zones.
> If toggle is turned off, the system will only check for inventory in the zone associated with the bin code added in the component line of the production order. This toggle is turned off by default.

1. Turn on the **Ignore Contents of To Bin Code** toggle to transfer the entire required quantity to the place bin regardless of the quantity that already exists in the place bin.
2. Enter the starting and ending due dates in the respective fields.

> **Note**
>
> The ending due date cannot be earlier than or the same as the starting due date.

1. Turn on the **Use Different Zone** toggle to exclude bins that belong to the same zone as the bin selected in the **To Bin Code** field value on the **Prod. Order Components** page.

   - When the **Ignore Zone Filter** and **Use Different Zone** toggles are turned off, the system considers only the bins associated with the same zone as the value in the **To Bin Code** field on the **Prod. Order Components** page when during inventory movement.
   - When the **Ignore Zone Filter** toggle is turned on and the **Use Different Zone** toggle is turned off, the system considers bins from all zones, including the bins in the same zone as the **To Bin Code** field value on the **Prod. Order Components** page, during inventory movement.
   - When both the **Ignore Zone Filter** and **Use Different Zone** toggles are turned on, the system considers only the bins from different zones and excludes bins associated with the zone specified in the **To Bin Code** field on the **Prod. Order Components** page when during inventory movement.

- When the **Ignore Zone Filter** toggle is turned off and the **Use Different Zone** toggle is turned on, the system displays an error message.

2. Turn on the **Create Inventory/Warehouse Movement** toggle to directly create an inventory movement. If a location is selected that has the setting Directed Put-away and Pick enabled, a Warehouse Movement will be created automatically.

> **Note**
>
> The system displays a notification if the Aptean Warehouse Management System extension is installed indicating that the default value of **Create Inventory/Warehouse Movement** field is determined based on the **Release Consolidated Movement to Scanner** field value on the **Process Manufacturing Setup** page.

1. Turn on the **Use Put-away Unit of Measure Code** toggle to calculate the quantities and express them in the Put-away Unit of Measure Code of the item. It also rounds up the required quantity of the inventory to its nearest value based on the following scenarios:

   For example, consider an item for which the base unit of measure is *LBS* and the unit of measure is *CASE*, where 1 *CASE* = 100 *LBS*.

   i. *Scenario 1*: If bin *A* needs 150 *LBS* of the item and bin *B* contains 1000 *LBS* of the same item, an inventory movement for the relevant item is created from bin *B* to bin *A* for the total quantity of 200 *LBS*.

   ii. *Scenario 2*: If bin *A* needs 150 *LBS* of the item and bins *B*, *C* & *D* each contain 50 *LBS* of the same item, an inventory movement for the relevant item is created by transferring 50 *LBS* from each take bin to bin *A* for the total quantity of 150 *LBS*.

   iii. *Scenario 3*: If bin *A* needs 150 *LBS* of the item and bins *B* & *C* each contain 100 *LBS* of the same item, an inventory movement for the relevant item is created by transferring 100 *LBS* from each take bin to bin *A* for the total quantity of 200 *LBS*.

   iv. *Scenario 4*: If bin *A* needs 150 *LBS* of the item and bins *B* contains 100 *LBS*, and bin *C* contains 90 *LBS* of the same item, an inventory movement for the relevant item is created by transferring 100 *LBS* from bin *B* and 50 *LBS* from bin *C* to bin *A* for the total quantity of 150 *LBS*. If any one of the take bins has insufficient inventory to round up to the nearest value, this scenario will take place.

   - When the **Use Put-away Unit of Measure Code** toggle is turned on:
   - The system rounds the quantity based on the put-away UOM.
   - The rounded quantity value is updated in the **Quantity** and **Unit of Measure Code** fields on the **Internal Movement** page.
   - Any residual quantity that cannot be converted to the put-away UOM is listed on a separate line using the base UOM.

- The movement respects lot tracking and bin priority, as per the location setup.
- If the selected lot contains more than required quantity but rounds to a full put-away UOM, the system includes the entire rounded quantity in the movement.

For example,

- On the **Item Card** page, the **Item** field value is set to *COMP ITEM*, the **Base Unit of Measure** field value is set to *KG*, and the **Put-away Unit of Measure** field value is set to *PCS*.
  1 PCS = 73 KG
- On the **Prod. Order Components** page, the **Required Quantity** field value is set to *310 KG*, which is equivalent to *4.25 PCS*, and the **Rounded Quantity** field value is set to *5 PCS* (365 KG).

Bin and lot availability in location

Bin	Lot No	Quantity (KG)	UOM equivalent
Bin 1	LOT0001	290 KG	3.97 PCS
Bin 1	LOT0002	10 KG	0.13 PCS
Bin 2	LOT0003	180 KG	2.46 PCS

The system will:
1. Round the required 4.25 PCS to 5 PCS.
2. When the **Pick According to FEFO** toggle is turned on, the system selects lots based on the FEFO.
3. Create the movement in two lines:
- 5 PCS (Put-away UOM) = 365 KG
- Any remaining residual not required will not be picked, unless overpicking is allowed.

FEFO based internal movement behavior

- If the **Pick According to FEFO** toggle on the **Location Card** is turned off, the system picks items based on the **bin ranking** field value on the *Bins* page.
- If the **Pick According to FEFO** toggle on the **Location Card** is turned on, the system picks items based on the FEFO lot expiration.
- On the **Include Lines for Shortages** toggle to create the internal movement lines indicating any demand exceeding the available supply. These lines will be generated without any value in the **From Bin Code** field, serving as a notification of insufficient supply. You may need to manually edit or delete these lines to create inventory movement. The system retains the **Quantity** field value on the **Internal Movement** page when you select a value for the **From Bin Code** field, even if the **From Bin Code** was initially left blank and the quantity was entered first.

- On the **Filter: Prod. Order Component** FastTab, select the bin code that is assigned to the relevant production order component line in the **Bin Code** field. You can also filter the production order component lines based on the filters you apply.
- In the **Component Pick Method** field, select an option to filter the production order component lines based on their pick method.
  - *Blank*: Filters the production order components for which the **Component Pick Method** field value is blank on the **Prod. Order Components** page.
  - *Consolidated*: Filters the production order components for which the **Component Pick Method** field value is set to *Consolidated* on the **Prod. Order Components** page.
- In the **Consolidated Consumption** field, select an option to filter the production order component lines based on their consumption method.
  - *Blank*: Filters the production order components regardless of whether the **Consolidated Consumption** checkbox is selected or cleared on the relevant **Prod. Order Components** page.
  - *No*: Filters the production order components for which the **Consolidated Consumption** checkbox is cleared on the **Prod. Order Components** page.
  - *Yes*: Filters the production order components for which the **Consolidated Consumption** checkbox is selected on the **Prod. Order Components** page.
- Select **OK** to confirm.
- Select the Search icon  , enter **Internal Movements**, and then choose the related link.
  The Internal Movements list page opens.
- Select the required **No.**
  The **Internal Movement** page opens.
  Two lines are created for the items that must be moved to the production bin.
  For item number 0029, in total, 18 pieces must be moved (5 from the first production order and 13 from the second) from the DRY Bin Code to the COOKER001_MO. For item number 0026, in total 70 pieces must be moved (20 from the first production order and 50 from the second).
- On the action bar, select **Create Inventory Movement**.

> **Note**
>
> The internal movement lines that have values in the **From Bin Code** and **To Bin Code** fields are considered while creating inventory movement.

- Select **Yes** to confirm.

To prevent ending up with large inventory movements, the function Create Inventory Movement (on the **Internal**

Movement page) has the ability to apply several filters (Item No., From Bin Code) to reduce the size of that inventory movement.

- In the **Item No.** field, select a value.
- In the **To Bin Code.** field, select a value.
  You can create internal inventory movements on the **Create Consolidated Production Movement** page, based on the **Available Qty. to Take** field values on the **Bin Contents** page.

  1. Scenario 1: Lot-by-lot movement

     - The **Pick According to FEFO** toggle on the **Location Card** page is turned on.
     - The **Strict Expiration Posting** toggle on the **Item Tracking Code Card** page is turned on.
       The internal inventory movement is processed based on the **Available Qty. to Take** field values on the **Bin Contents** page by lot number, ensuring items are picked based on lot number FEFO order and expiration controls.

     > **Note**
     >
     > Expired lots will not be considered. If all lot expiration dates are the same, inventory movement is created based on **Bin Ranking** field value on the **Bin Contents** page.

  2. Scenario 2: Movement based on bin ranking

     - The **Pick According to FEFO** toggle on the **Location Card** page is turned off.
     - The **Strict Expiration Posting** toggle on the **Item Tracking Code Card** page is turned off.
       The internal inventory movement is based on **Bin Ranking** and **Available Qty. to Take** field values from the **Bin Contents** page.

  3. Scenario 3: Movement based on available quantity to take

     - The **Pick According to FEFO** toggle on the **Location Card** page is turned on.
     - The **Strict Expiration Posting** toggle on the **Item Tracking Code Card** page is turned off.
       The internal inventory movement is based on the **Available Qty. to Take** values on the **Bin Contents** page by lot number, ensuring items are picked based on lot number FEFO order and includes expired lots.

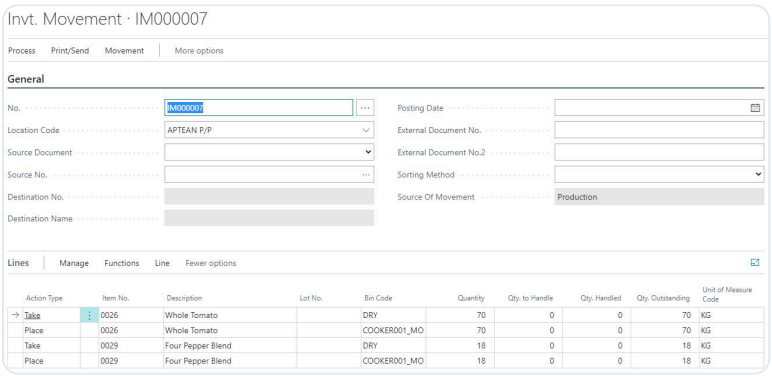
     > **Note**
     >
     > If all expiration dates of the lots are the same, inventory movement is created based on **Bin Ranking** on the **Bin Contents** page .

- Select **OK.**
  If no item number/and or bin code is selected, the inventory movement will be created for the complete internal movement.

A new Inventory Movement is created based on the item number/bin code filter and the lines are deleted from the existing Internal Movement.

1. Select the Search icon , enter **Inventory Movements** and then choose the related link.
   The **Inventory Movements** list page opens.
2. Select the required **No.**
   The Inventory Movement page opens.

> **Note**
>
> When different items are listed on the **Lines** FastTab of the **Internal Movement** page, the **Item No.**, **From Bin Code**, **To Bin Code**, **Due Date**, and **Unit of Measure Filter** fields appear on the **Create Inventory Movement** page after executing the **Create Inventory Movement** action. Based on the selected filters, only the internal movement lines that match the filter criteria is submitted for inventory movement creation.



The Inventory Movement is created to move the items in a consolidated matter from the warehouse to the production area.
The system automatically assigns the lot number and updates the **To Bin Code** and **Quantity** field values on the **Internal Movement** page based on the assigned lot number when a consolidated production movement is created and when the **Pick According to FEFO** toggle on the **Location Card** page is turned on.
Case 1: FEFO enabled with strict expiration

- The **Pick According to FEFO** toggle on the **Location Card** page is turned on.
- The **Strict Expiration Posting** toggle on the **Item Tracking Code Card** page is turned on.

When an internal movement is created at the lot level with item tracking lines, the system automatically ignores expired lots during selection.

Case 2: FEFO disabled with no expiration

- The **Pick According to FEFO** toggle on the **Location Card** page is turned off.

- The **Strict Expiration Posting** toggle on the **Item Tracking Code Card** page is turned off.

The system creates internal movement at the bin level, without including item tracking lines. Items are selected according to the **Bin Ranking** field value on the **Bins** page.
Expired lots are included during the selection process.

Over-pick in an inventory movement

Prerequisites

- On the **Process Manufacturing Setup** page, the **Allowed Over pick Consolidated Movement** toggle should be turned on.
- The relevant inventory movement should be created using the Create Consolidated Production Movement function.
- On the **Inventory Movement** page, the **Source Of Movement** field should read **Production**.

To over-pick in an inventory movement:

1. Select the Search icon  , enter *Inventory Movements*, and then choose the related link.
   The **Inventory Movements** list page opens.
2. Select the relevant inventory movement created using the Create Consolidated Production Movement function.
   The **Inventory Movement** page opens.
3. In the **Qty. to Handle** field, enter the quantity you want to handle, which is greater than the outstanding quantity.
   Now the values in the **Quantity** and **Qty. Outstanding** fields will change accordingly.

   > **Note**
   >
   > The quantity will be adjusted only on the specific line for which you are changing the value.

4. On the action bar, choose **Process** > **Register Invt. Movement**.

Consolidated consumption

With consolidated consumption, the user can consolidate production component lines and do the consumption posting in one go instead of posting consumption for each production order. In hectic production environments where there is no time for shop floor operators to manually post consumption, a consolidated consumption posting routine is required.

Via consolidated consumption posting, the total bin content of the To Bin code used in selected production component lines is assigned pro rata to these lines and posted as consumption. This method makes the warehouse employees responsible for correct consumption posting.

The **Calculate Consolidated Consumption** action creates consumption journal lines for all selected production component lines for a specific bin and it calculates the consumption quantity on each line where the bin content of the selected bin is divided pro rata, based on normative quantities, to all these component lines.

When the Calculate Consolidated Consumption function is executed, the production component lines are filtered where the Consolidated Consumption setting has been enabled, and the values are entered by the user: Location/ Bin code until a selected due date/time.

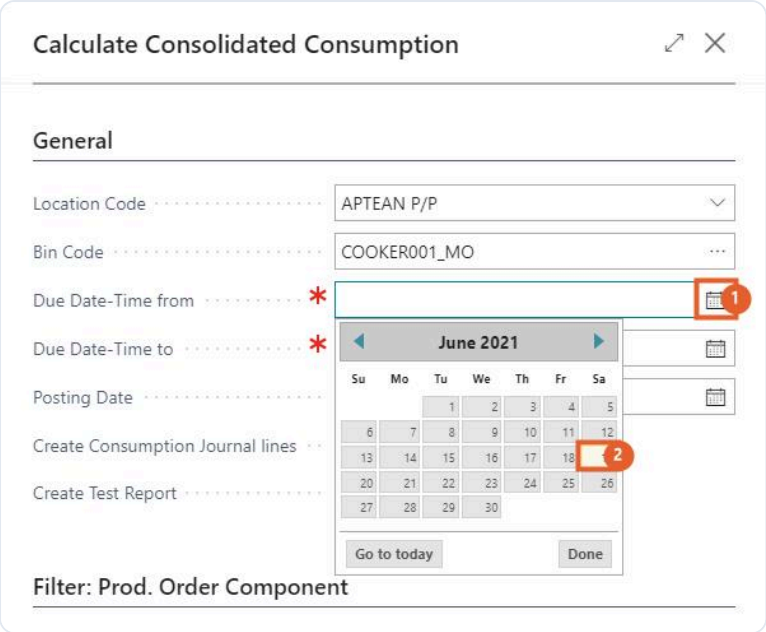
The function also has the option to print a Test Report to identify significant deviations between normative consumption quantities versus the calculated consumption quantities.

The **Calculate Consolidated Consumption** action takes the actual output or expected output into account based on the selected value in the **Calc. Based On** field. For actual output, the output for the items needs to be posted before executing the following steps.

For expected output, where the actual output has not yet been posted or only partially posted, the system uses the remaining quantity from the production order component line to proportionally allocate bin content across component lines. This allows warehouse teams to perform timely and consolidated consumption postings based on planned production quantities.

To calculate the consumption:

1. Select the Search icon , enter **Calculate Consolidated Consumption** and then choose the related link. The **Calculate Consolidated Consumption** page opens.
2. In the **Location Code** field, select the required Code from the list.
3. In the **Bin Code** field, select the AssistEdit button to select the required Code.
4. Select **OK**.
5. In the **Due Date from** and **Due Date to** fields, select the date from the calendar.
6. In the **Due Time from** and **Due Time to** fields, enter the time.



7. Turn on the **Create Consumption Journal Lines** toggle to generate consumption journal lines for all selected production component lines using the bin content of the selected bin. The consumption quantity per component line is calculated, based on the selected value in the **Calc. Based On** field.

    - If the *Actual Output* option is selected, the system calculates normative consumption using the posted output quantity.
    - If the *Expected Output* option is selected, the system calculates normative consumption using the remaining quantity on the production order component line, allowing consolidated consumption posting before the output is posted.

8. Turn on the **Print Report** toggle to print the report.
9. In the **Rounding Source** field, select the required value from the following options to round off the consolidated consumption quantity.

    - *Per Item*: The system uses the rounding precision value from the **Item Card** page.
    - *User-Defined*: The system uses the rounding precision value entered in the **Rounding Precision** field.

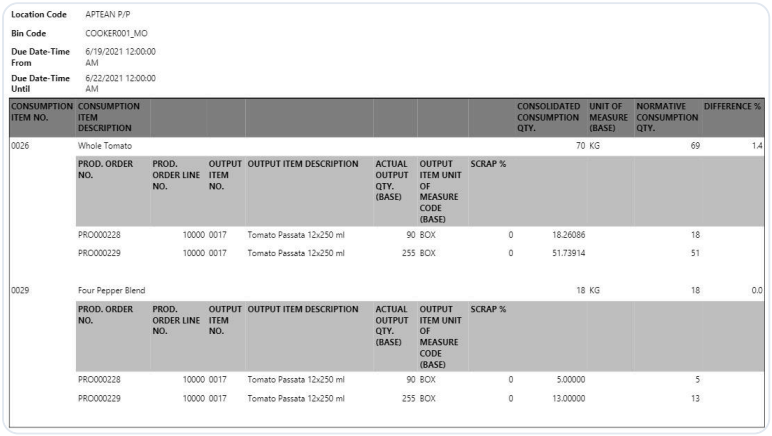
10. In the **Rounding Precision** field, enter the value to round off the consolidated consumption quantity. This configuration determines how the quantity is calculated and recorded in the consumption journal and displayed in the printed report.

> **Note**
>
> This field is editable only when the **Rounding Source** field value is set to *User-Defined* and the value can be up to five decimal places.

11. In the **Calc. Based On** field, select how the system should calculate the consolidated consumption quantity for each component line.

- *Actual Output*: The system calculates consumption based on the quantity of the posted output for each production order. This is the default option.
- *Expected Output*: The system calculates consumption based on the remaining quantity on the production order component line.

12. Select **OK**.
    If the Create test report toggle is turned on, a new dialog is shown where the report can be opened.
13. Select **Preview & Close** button to create the report.



Location Code	APTEAN P/P
Bin Code	COOKER001_MO
Due Date-Time From	6/19/2021 12:00:00 AM
Due Date-Time Until	6/22/2021 12:00:00 AM

CONSUMPTION ITEM NO.	CONSUMPTION ITEM DESCRIPTION							CONSOLIDATED CONSUMPTION QTY.	UNIT OF MEASURE (BASE)	NORMATIVE CONSUMPTION QTY.	DIFFERENCE %
0026	Whole Tomato							70	KG	69	1.4
	PROD. ORDER NO.	PROD. ORDER LINE NO.	OUTPUT ITEM NO.	OUTPUT ITEM DESCRIPTION	ACTUAL OUTPUT QTY. (BASE)	OUTPUT ITEM UNIT OF MEASURE CODE (BASE)	SCRAP %				
	PRO000228	10000	0017	Tomato Passata 12x250 ml	90	BOX	0	18.26086		18	
	PRO000229	10000	0017	Tomato Passata 12x250 ml	255	BOX	0	51.73914		51	
0029	Four Pepper Blend							18	KG	18	0.0
	PROD. ORDER NO.	PROD. ORDER LINE NO.	OUTPUT ITEM NO.	OUTPUT ITEM DESCRIPTION	ACTUAL OUTPUT QTY. (BASE)	OUTPUT ITEM UNIT OF MEASURE CODE (BASE)	SCRAP %				
	PRO000228	10000	0017	Tomato Passata 12x250 ml	90	BOX	0	5.00000		5	
	PRO000229	10000	0017	Tomato Passata 12x250 ml	255	BOX	0	13.00000		13	

It shows that there are two consumption items, number 0026 and 0029. The consolidated consumption quantity stands for the bin content, which was 18 pieces for item 0029 and 70 pieces for item 0026. The whole bin content for this item will be used to distribute quantities pro rata among the production consumption lines that post consumption from the bin code. The consolidated consumption quantity will be entered on the consumption journal lines, so that the consumption will be divided in a consolidated manner.
The normative consumption quantity indicates which quantity, according to the system, would be consumed according to the posted output. It is calculated by taking the actual output of the production orders, which was 90 for the first production order and 255 for the second and multiplying it with the Quantity Per from the corresponding production BOM line, increased with the Scrap %. The result is expressed in the Base Unit of Measure of the component item. According to the BOM setup for item number 0026, normally 18 and 51 pieces would have been consumed, which makes a total of 69. Compared to the consolidated consumption quantity of 70, there is a small difference of 1,4% more consumption, which could be acceptable.
The goal of the report is to see if there are any big differences between what the system suggests as consumption (normative consumption) and what the function suggests as consolidated consumption. If there are big differences, they can be acted upon by checking, for example, if the bin content is correctly registered. If the consolidated consumption is based on expected output (i.e., no actual output posted), the test report will still calculate normative consumption based on expected quantities and BOM setup.
You can use this report to identify any significant differences and ensure bin content distribution is appropriate, especially when operating without finalized output postings.

14. Select **Close** to close the report.
    A message appears stating that consumption journal lines have been created.
15. Select **OK**.

16. Select the Search icon , enter **Consumption Journals** and then choose the related link.
    The **Consumption Journals** page opens.
17. In the **Batch Name** field, select the AssistEdit button to select the item journal batch template.
18. Select **OK**.

A consumption journal line has been created per production order and per component line with the calculated consolidated consumption quantities. If the item is lot-tracked, the lot numbers are assigned accordingly as well.

> **Note**
>
> If you also use the Aptean License Plating extension, when the consumption journal line and their item tracking lines are created, the license plate number(s) assigned to the lot number are also added.

After reviewing the quantities, the user can post the consumption journal manually. The bin content for the Monday-bin would be completely emptied and the consumption is posted for the production orders that were planned on that day and linked to this specific bin suffix.

Ability to post consumption on component line without the usage of warehouse pick

In standard Business Central, you can post consumption on a production component line without using a warehouse pick by configuring the **Prod. Consumption Whse. Handling** field on the **Location Card** page. This field offers the following options:

- *No Warehouse Handling*
- *Warehouse Pick (optional)*
- *Inventory Pick/Movement*
- *Warehouse Pick (mandatory)*

To override the warehouse pick process during the consumption posting on the production component line, follow these steps:

1. Navigate to the desired **Location Card** page.
2. On the **Warehouse** FastTab, in the **Prod. Consumption Whse. Handling** field, choose either the *No Warehouse Handling* or *Warehouse Pick (optional)* option.

This provides more flexibility in managing production processes within Business Central.

> **Note**
>
> You can also use Catch Weight Item in Consolidated Consumption on integration of the Aptean Process Manufacturing extension with the Aptean Catch Weight extension. To know more, see here.

Co-products

Article • 2/28/2025 • 31 min read

A lot of production companies have co-products during their production process: one input and multiple outputs. The functionality makes it possible to register the input once and have multiple outputs during the production process.

It allows you to register consumption items, which are used for multiple outputs, on the production order line of the main item. The system reallocates this consumption automatically when finishing the production order to the different co-product items based on an allocation key. This allocation key is calculated with the 'Quantity Per' of the production BOMs and the actual output quantity.

Production BOM Setup

> **Note**
>
> If you are an existing user, when you execute Release Production Order action, you will be prompted to upgrade to the new version changes by executing the Conversion Script action. To know more see, Setup to integrate with the new version.

The functions of co-products are explained while using an example where the item 'Cinnamon 1 Kg in a can' will be produced.

1. Select the Search icon  , enter **Production BOMs** and then choose the related link.
   The **Production BOMs** list page opens.
2. Select the required **No.**
   The **Production BOM** page opens.
3. On the **Lines** FastTab, fill in the necessary fields.
4. On the **Co-Product** FastTab, fill in the necessary fields.
   If you turn on the **Co-Product** toggle on the **General** FastTab, the **Co-Product** FastTab is disabled.
5. In the **Co-Product Quantity** field, enter a positive value.
   You cannot enter a negative value.
6. In the **BOM for Co-Product** field, select a value from the dropdown list.
   When you enter the **Item No.** field and select Item in the **Type** field, the **Co-Product** checkbox is selected automatically.

> **Note**
>
> You can also use a **Catch Weight Item** as a Co-Product on integration of the Aptean Process Manufacturing extension with the Aptean Catch Weight extension. To know more, see here.

During the production of the main item 'Cinnamon 1 Kg in a can', some cinnamon will remain which will not be put in a can. These leftovers will be placed in a bag so they can, later on, be used for another (production) process. In the production BOM lines for the main item 'Cinnamon 1 Kg in a can', the co-products that will occur during production are assigned by selecting the Co-product checkbox, which is done for item 0074, which is the cinnamon in a bag (the co-product). Multiple production BOM lines can be enabled with this setting.

The co-product 'Cinnamon 50kg Bag' has its own item card and Production BOM. The co-product Production BOM will be used when creating a production order for the main item. This co-product BOM must have the setting **Co-Product BOM** enabled in the header.

It is necessary to assign in the lines the item(s) that are also in the main product. Here, the **Reallocate Consumption from Main Item** checkbox is selected for the item 0072 Bulk Cinnamon, since this item is used for both the main item (cinnamon in a can) and the co-product (leftover cinnamon).

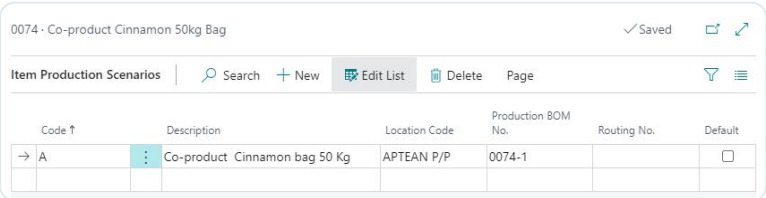
When a phantom BOM is used in the production, the system accurately reallocates and consumes items, ensuring correct BOM interpretation. It also validates reallocated consumption items, supports production order refresh, and prevents errors when a phantom BOM is included in the main BOM.

To store the co-product in packaging material, the big bag, and the label are needed as well in this production BOM.

For the co-product item, a production scenario needs to be set up as well.

1. Select the Search icon , enter **Items** and then choose the related link.
   The **Items** list page opens.
2. Select the required **No.**
   The **Item Card** page opens.
3. On the action bar, select **More options** > **Related** > **Bill of Materials** > **Production** > **Production Scenarios**.

A production scenario, as shown below, is needed during the creation of the production order for the main item.



Validations on the Released Production Order page

1. Select the Search icon  , enter **Released Production Orders**, and then choose the related link.
   The **Released Production Orders** list page opens.
2. On the action bar, select **New**.
   The **Released Production Order** page opens.
3. On the **General** FastTab,
   a. In the **Source Type** field, select *Item* from the options.
   b. In the **Source No.** field, select the desired **No**.
   c. In the **Quantity** field, enter the value of the quantity.
4. On the **Posting** FastTab, in the **Location Code** field, select the desired code.

> **Note**
>
> While creating a Released Production Order, the **Bin Code** field is updated based on the newly created production order, selected item, and variant code instead of the Default Manufacturing Location set up on the **Process Manufacturing Setup** page.

5. On the action bar, select **Home Refresh Production Order**.
6. Select **OK**.

[!NOTE]

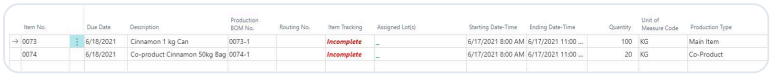
When processing with a phantom BOM, the system checks for reallocation items within the co-product BOM. If the same item, item variant, and unit of measure (UoM) exist in both the main item BOM and the co-product BOM, the system allows the refresh, ensuring that production order lines are updated correctly.
However, if the system does not find the same combination in the phantom BOM, an error occurs, preventing the refresh process.

You can now see the component items associated with the main item from the secondary line of the production order.

Co-Products in the Production Process

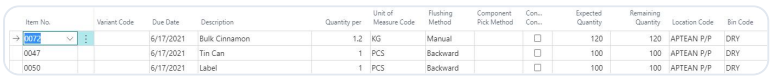
If Co-products are involved in a production order, the production order line of the Main Item and the related production component lines are created. The only exception is that for Production BOM lines with the setting Co-product = Yes, no production component lines are created but will be created as an extra production order line.

1. Select the Search icon , enter **Released Production Orders** and then choose the related link.
   The **Released Production Orders** list page opens.
2. Select the required **No.**
   The **Released Production Order** page opens.
   After creating a released production order for the main item, item 0073, with quantity 100 and refreshing the order, a second production order line is created for the co-product. The second production order line is created with a quantity of 20, due to the fact of the -0.2KG from the production BOM for item 0073, multiplied by the output quantity of the main item.



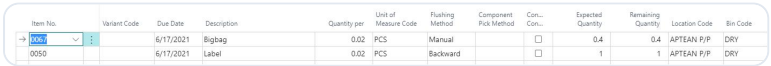
Item No.	Due Date	Description	Production BOM No.	Routing No.	Item Tracking	Assigned Lot(s)	Starting Date-Time	Ending Date-Time	Quantity	Unit of Measure Code	Production Type
→ 0073	6/18/2021	Cinnamon 1 kg Can	0073-1		Incomplete		6/17/2021 8:00 AM	6/17/2021 11:00 ...	100	KG	Main Item
0074	6/18/2021	Co-product Cinnamon 50kg Bag	0074-1		Incomplete		6/17/2021 8:00 AM	6/17/2021 11:00 ...	20	KG	Co-Product

   The Production Type specifies the type of the production order line. When one or more items in the Production BOM lines have the setting Co-Product enabled, the field is filled with Main Item. When the production order line is created because it concerns a co-product, the field is filled with Co-Product.
3. On the **Lines** FastTab, navigate to the desired line, select the production order line with **Main Item** as *Production Type*.
4. On the action bar, select **Line** > **Components**.



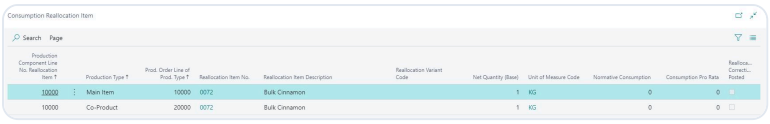
Item No.	Variant Code	Due Date	Description	Quantity per	Unit of Measure Code	Flushing Method	Component Pick Method	Con... Con...	Expected Quantity	Remaining Quantity	Location Code	Bin Code
→ 0072		6/17/2021	Bulk Cinnamon	1.2	KG	Manual		☐	120	120	APTEAN P/P	DRY
0047		6/17/2021	Tin Can	1	PCS	Backward		☐	100	100	APTEAN P/P	DRY
0050		6/17/2021	Label	1	PCS	Backward		☐	100	100	APTEAN P/P	DRY

5. The Production Order Components for the first production line doesn't contain the co-product item. For this item's production BOM, an additional line with the co-product is present but not shown as a negative component because it's used to create a separate production line.
6. Again, select the production order line with *Co-product* as **Production Type**.
7. On the action bar, select **Line** > **Components**.



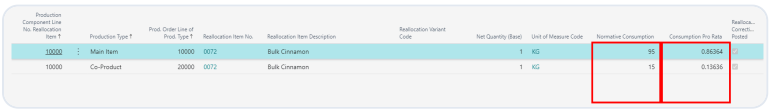
Item No.	Variant Code	Due Date	Description	Quantity per	Unit of Measure Code	Flushing Method	Component Pick Method	Con... Con...	Expected Quantity	Remaining Quantity	Location Code	Bin Code
→ 0069		6/17/2021	Bigbag	0.02	PCS	Manual		☐	0.4	0.4	APTEAN P/P	DRY
0050		6/17/2021	Label	0.02	PCS	Backward		☐	1	1	APTEAN P/P	DRY

   The Production Order Components for the second production line only show the items that are needed to pack the co-product into. The bulk cinnamon, which was marked as a 'reallocation item' in the related production BOM for the co-product, is only used in the production components for the main item. The consumption for this item only takes place one time for the main item and will be redistributed to the co-product accordingly.
   When the production order is refreshed, the items that were marked as reallocation items are captured on the page called Consumption Reallocation Item. This page shows detailed information about the ratio of consumption between the main item and the co-product item.
8. Select the production order line with *Main Item* as the **Production Type**.
9. On the action bar, select **Line** > **Consumption Reallocation Item**.

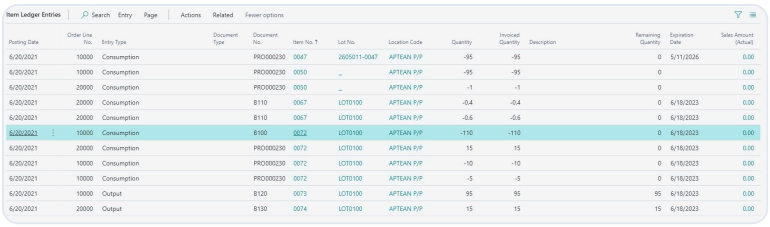


The commonly used item, in this case, 0072 Bulk Cinnamon shown on this page is being consumed by the main item and by the co-product. All the items that are marked as a re-allocation item is shown on this page and used as consumption for both the main item and the co-product.
The Net Quantity (Base) is the reallocation factor. It specifies the quantity that represents the net consumption quantity of the reallocation item (expressed in the Base Unit of Measure) needed for the production of one Base Unit of Measure of the main item or co-product. When you produce a kilogram of the main item, you'll need a kilogram of the bulk cinnamon. This also applies when one kilogram of the co-product is produced.
When the output for the main item (100KG) and co-product (20KG) is posted, the system will look at the actual output quantity and this net quantity as a basis to divide the actual input.

10. On the action bar, select **Change Status**.
    If the status of a released production order is changed to Finished, the actual posted consumption of the Reallocation item needs to be proportionally allocated to the Main item and the co-product. This correction needs to be executed via posting of extra consumption journal lines. Because the posting of these extra consumption journal lines can run in unexpected errors, it must be possible to skip the posting of these extra journal lines when changing the status of a released production order to Finished. The toggle Skip Reallocation Consumption Correction specifies if the production order must be finished without creating and posting extra consumption journal lines for the reallocation item.
11. Turn off the **Skip Reallocation Consumption Correction** toggle.
12. Click **Yes**.
13. Select the Search icon , enter **Finished Production Orders** and then choose the related link.
    The **Finished Production Orders** list page opens.
14. Select the required **No.**
    The **Finished Production Order** page opens.
15. On the **Lines** FastTab, select production order line with *Main Item* as **Production Type**.
16. On the action bar, select **Line** > **Consumption Reallocation Item**.



The Normative Consumption is calculated via the formula Net Quantity multiplied by the Total Output of the main item or co-product, which was 95 KG for the main item and 15 KG for the co-product.
The Consumption Pro Rata is calculated by dividing the Normative Consumption of the line by the Total Normative Consumption for all lines. It shows the ratio of consumption between the two output items.
After finishing the production order, extra consumption journal lines are created for the reallocation item 0072.
The item ledger entries for the finished production order are as follows:



The first consumption posting for the reallocation item 0072 was done manually with a quantity of 110 on the main item.
After finishing the production order, extra consumption journal lines are automatically created for the reallocation item 0072. First, 15 KG is reallocated to the co-product (with Order Line No. 20.000), and then 15 KG is taken from the main item (with Order Line No. 10.000).

> **Note**
>
> If you also use the Aptean Food and Beverage License Plating extension, the consumption journal lines are automatically created and posted including a license plate number. In this case, the released production order number will be inserted as the license plate number. This is done to prevent running into errors when posting the consumption journal lines. Due to this extra created item ledger entries, the main item has a consumption of 95 KG of cinnamon, and the co-product has a consumption of 15 KG, as shown in the Normative Consumption. The values for the Normative Consumption and Consumption Pro Rata fields of the Consumption Reallocation Item table are calculated when the status of the production order is changed to finished.

Integration of Production Scenarios

Released Status

The Production Scenario for a main item can be changed as below:

You can the change the production scenario for the existing released production orders.

1. Select the Search icon , enter **Released Production Orders** and then choose the related link.
   The **Released Production Orders** list page opens.
2. Select the desired **No.**
   The **Released Production Order** page opens.
3. On the **Lines** FastTab, select **Functions** > **Change Production Scenario**.
   The **Change Production Scenario** page opens.
4. On the **New** FastTab, In the **New Production Scenario** field, select the desired line from the list of production scenario that is to be replaced for the main item.

5. Turn on the **Optimize Batch Size** toggle to enable batch size optimization based on the new production scenario. Once this toggle is turned on, the fields from the **Optimize Batch Size** page will become visible. These fields are automatically populated with values from the new production scenario, but you can modify them as needed. This toggle is available only when the following toggles on the **Process Manufacturing Setup** page are turned on.

   - **Enable Automatic Optimization** toggle for production orders.
     - **Enable Optimization in Planning** toggle for planning worksheets.

       This toggle is also available on the **Change Production Scenario** page when accessing it from the **Production Order Scheduling** page. For more information, see Batch size in Production Order and Component lines.

6. Select **OK**.
   The Released Production Order line gets updated with the new production scenario selected along with the consumption reallocation and components.
   The Routing No. is inherited for the main item from the Production Scenario Line.
   The Routing No. for Co-Product is inherited from the Routing No. field on the Replenishment FastTab of the respective item card.
   The Routing No. remains empty if the line does not have any values.

Planned Status

You can create a planned production order by changing the production scenario from the planning worksheet.

You must not have any production order for the related main item on the Firm Planned Production Order, Planned Production Order and Released Production Order page.

1. Select the Search icon , enter **Planning Worksheet**, and then choose the related link.
   The **Planning Worksheet** page opens.
2. On the action bar, select **Prepare** > **Calculate Regenerative Plan**.
   The **Calculate Regenerative - Plan Wksh.** page opens.
3. In the **Item No.** and **Location Code** fields, choose the desired value from the list.
4. Select **OK**.
   This inserts a line on the Planning Worksheet page with the default production scenario code for the selected main item.
5. To change the production scenario for the selected line in the planning worksheet, follow the below steps:

   a. Navigate to the desired line.

   b. On the action bar, select **Actions** > **Functions** > **Change Production Scenario**.
   The **Change Production Scenarios** page opens.

c. On the **New** FastTab, in the **New Production Scenario** field, select the desired line from the list of production scenario that is to be replaced for the main item.

d. Select **OK**.
The Production Scenario Code fields get updated with the new production scenario selected.

e. Select the **Accept Action Message** checkbox.

f. On the action bar, select **Home** > **Carryout Action Message**.
The **Carryout Action Msg. – Plan** page opens.

g. In the **Production Order** field, choose the Planned option from the list.

h. Select **OK**.
The Planned Production Order is created.

6. Select the Search icon , enter **Planned Production Orders**, and then choose the related link.
The **Planned Production Orders** list page opens.
7. Select the desired **No.**
The **Planned Production Order** page opens.
The planned production order line is updated for the respective production scenario along with the routing, consumption reallocation, and components.
The same works for the Firmed Planned Production Order.

Setup to integrate with the new version

When you create a production order and execute the Refresh Production Order action, an error appears when the BOM for Co-Product field is empty and the Co-Product toggle is turned on in the respective production BOM line. A notification appears through which you are directed to upgrade to the new version changes by executing the Conversion Script action.

This notification will appear for the existing user once when the application is reinstalled. It updates all the Production BOMs in the Production BOM line with the Co-Product toggle turned on. The BOM number for the production BOM is inherited from the respective Item Production Scenario of the Item to the BOM for Co-Product field.

You have to do the upgradation setup either in the planned or firmed planned or released production order once.

Integration with Split Production Order function

On splitting the Production Order with Co-Product lines with the Split Production Order function, the resulting production order must have initial production lines along with the co-product lines.

1. Select the Search icon  , enter **Production Order Scheduling** and then choose the related link.
   The **Production Order Scheduling** list page opens.
2. Navigate to the desired line.
3. On the action bar, select **More options** > **Actions** > **Scheduling** > **Split Production Order**.
   The **Split Production Order** page opens.

> **Note**
>
> The system does not support automatic optimization when using the split production order functionality.

4. On the **Prod. Order Capacity Need** FastTab, select the desired routing line needs to be split.
5. On the **Split Production Order** FastTab, in the **Split Off Quantity** field, enter a value. [!NOTE] The Split Off Quantity value cannot be greater than Total Remaining Quantity value.
6. The **Split Off Time** field is automatically populated based on the value entered in the **Split Off Quantity** field. You are also manually allowed to enter the value in the Split Off Time field.

> **Note**
>
> The Split Off Time value cannot be greater than Total Remaining Time value.

7. Click **OK.**
   The selected production order is split into two production orders. On splitting the routing and component lines are calculated and updated to the main item and co-product based on the remaining quantity and time and, split quantity and time.

Deletion of Production BOM

You can delete a **Production BOM** if the line records do not contain the Co-Products that are used in other Production BOMs or Production BOM Versions and with status as Released.

Co-product routing

Article • 4/23/2025 • 3 min read

You can use the **Co-Product Routing** action to fill the route for co-products. When the production order is refreshed, the **Routing No.** field value is updated on the **Released Production Order** page.

To configure co-product routing, follow these steps.

1. Select the Search icon  , enter **Items** and then choose the related link.

   The **Items** list page opens.
2. Select the required **No.** from the list.

   The **Item Card** page opens.
3. On the action bar, select **More options** > **Related** > **Bill of Materials** > **Production** > **Production Scenarios**.

   The **Production Scenarios** page opens.
4. On the action bar, select **Actions** > **Co-Product Routing**.

   The **Co-Product Routing** page opens.
5. Enter the following field values.

Field	Description
Production BOM Version Code	Specifies the version of the production BOM that contains the co-product.
Co-product Item No.	Specifies the item number of the co-product that is produced alongside the main product.
Routing No.	Specifies the production routing number where the item is used.

Co-Products routing FactBox

The **Co-Products Routing** FactBox suggests the possible routes available for the selected co-product line on the **Production BOM**, **Production BOM Version**, and **Item Production Scenarios** pages.

This FactBox displays the following information:

Field	Description

Item No.	Specifies the item number associated with the production scenario.
Item Description	Specifies the description of the parent item.
Production Scenario Code	Specifies the code of the production scenario.
Description of Scenario	Specifies the description of the production scenario.
Routing No.	Specifies the production routing number where the item is used.

Note

These fields are displayed only when the Aptean Production Scenarios extension is installed.

Unplanned output and consumption

Article • 8/27/2025 • 23 min read

The Unplanned Consumption function makes it possible to set up one or more items that can, for example, replace or serve as an alternative for a component item when a material is not available.

This is done so that a shop floor employee is able to add component items without changing the selected production BOM in the production order.

Unplanned Consumption

If unplanned consumption must be added during the production process, for example, because a specific item has run out of stock, it is necessary to narrow down the items that can be added as unplanned consumption. In this way, the production process can be continued by using other consumption than the planned item from the Production BOM.

Setup Unplanned Consumption

A setup table is needed to assign item numbers/ variant codes that are allowed to use for the function Add Unplanned Consumption.

- Select the Search icon , enter **Unplanned Consumption Setup** and then choose the related link.
  The **Unplanned Consumption Setup** page opens.

Item No.	Item Description	Variant Code	Production BOM No.	Unplanned Item Type	Unplanned Item Attribute	Unplanned Item Attribute Value	Unplanned Item No.	Unplanned Item Description	Unplanned Variant Code	Unplanned Unit of Measure Code
0026	Whole Tomato			Item			0030	Tomato paste		KG
0029	Four Pepper Blend			Item			0051	Pepper Black		KG
0029	Four Pepper Blend		0017-2	Item			0052	Pepper White		KG
0047	Tin Can			Item Attribute	Item Type	Packaging				
0026	Whole Tomato			Item			0031	Bread flower		KG
0068	Bell Pepper		P000005	Item			0069	Onion		KG
0068	Bell Pepper			Item			0070	Garlic		KG
0068	Bell Pepper			Item Attribute	Storage Condition	Cool max +4°C				
0017	Tomato Passata 12x250 ml			Item			0018	Tomato Passata 6x233 ml		KG
0017	Tomato Passata 12x250 ml			Item			0019	Grain Fed Angus Burger Australian		KG
0049	Water			Item			0018	Tomato Passata 6x233 ml		KG
0049	Water			Item			0019	Grain Fed Angus Burger Australian		KG

With this setup, it's specified which (unplanned) component item is allowed to replace the (planned) consumption item in the production order components.

An unplanned item can be set up based on the item number or set up with a specific item attribute.

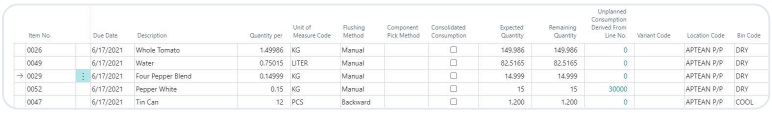
It's also possible to specify that the unplanned consumption item can only be used in a specific production BOM instead of any production BOM.

Unplanned Consumption in production order components

If during the execution of a production order unplanned consumption arises, for example because the item is out of stock, an extra production order component line should be created for this unexpected consumption.

Via the Add Unplanned Consumption function, this extra production component line can be created. Via this function, it is only allowed to add new lines for item/variant combinations that are set up as Unplanned Consumption Item and Variant in the Unplanned Consumption Setup.

1. Select the Search icon , enter **Released Production Orders** and then choose the related link.
   The **Released Production Orders** list page opens.
2. Select the required **No.**
   The **Released Production Order** page opens.
3. On the **Lines** FastTab, navigate to the desired line.
4. On the action bar, select **Line** > **Components**.
5. Select the production consumption with Item No. 0029 Four Pepper Blend.
6. On the action bar, select **Add Unplanned Consumption**.
   The **Add Unplanned Prod. Order Component** page opens.
7. In the **Unplanned Item No.** field, click the AssistEdit button to select the item that can be added as unplanned consumption for Item No. 0029 Four Pepper Blend.
8. Select **OK.**
9. Enter **Quantity**.
10. Select **OK**.



Item No.	Due Date	Description	Quantity per	Unit of Measure Code	Flushing Method	Component Pick Method	Consolidated Consumption	Expected Quantity	Remaining Quantity	Unplanned Consumption Derived From Line No.	Variant Code	Location Code	Bin Code
0026	6/17/2021	Whole Tomato	1.49986	KG	Manual		☐	149.986	149.986	0		APTEAN P/P	DRY
0049	6/17/2021	Water	0.75015	LITER	Manual		☐	82.5165	82.5165	0		APTEAN P/P	DRY
→ 0029	6/17/2021	Four Pepper Blend	0.14999	KG	Manual		☐	14.999	14.999	0		APTEAN P/P	DRY
0052	6/17/2021	Pepper White	0.15	KG	Manual		☐	15	15	30000		APTEAN P/P	DRY
0047	6/17/2021	Tin Can	12	PCS	Backward		☐	1.200	1.200	0		APTEAN P/P	COOL

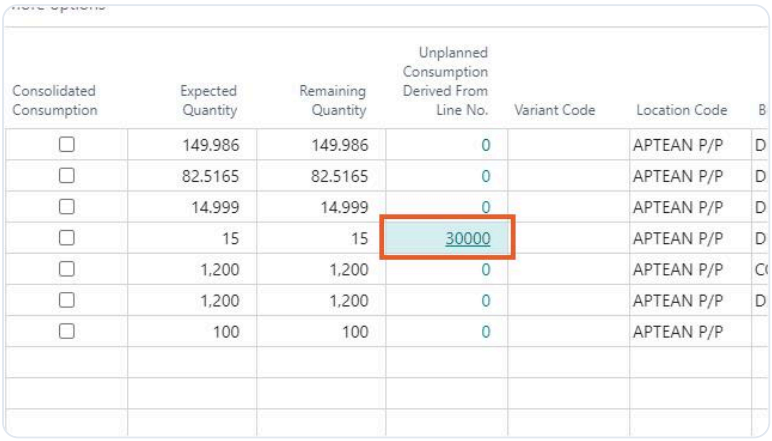
The unplanned consumption item is now shown below *Item No. 0029 Four Pepper Blend*. The entered quantity of 15 is shown in the **Expected Quantity** field.

The following points describe the impact of rounding precision on calculations when managing unplanned consumption.

- As per standard Business Central, the system uses the item's unit of measure rounding precision to calculate the **Quantity Per** field value. If the precision results in rounding down, the **Quantity Per** and **Expected Quantity** fields are set to lower values than expected on the **Prod. Order Components** page.

- In unplanned consumption, you enter the **Expected Quantity** field value for consumption. If a rounding precision is defined for the item, the system will round the **Quantity Per** field value. However, the system will retain the **Expected Quantity** field value you entered and will not recalculate it based on the rounded **Quantity Per** field.

The **Unplanned Consumption Derived From Line No.** field specifies the Prod. Order Components Line No. from where the unplanned consumption derives, which is line number **30000** in this case. When clicking on the 30000, it is shown which component item has an unplanned consumption item.



Consolidated Consumption	Expected Quantity	Remaining Quantity	Unplanned Consumption Derived From Line No.	Variant Code	Location Code	B
☐	149.986	149.986	0		APTEAN P/P	D
☐	82.5165	82.5165	0		APTEAN P/P	D
☐	14.999	14.999	0		APTEAN P/P	D
☐	15	15	30000		APTEAN P/P	D
☐	1,200	1,200	0		APTEAN P/P	C
☐	1,200	1,200	0		APTEAN P/P	D
☐	100	100	0		APTEAN P/P	

> **Note**
>
> You can also use Catch Weight Item in Unplanned Consumption on integration of the Aptean Process Manufacturing extension with the Aptean Catch Weight extension. To know more, see here.

You can post consumption on substitute items when there's a shortage of the original component to fulfill a production order due to partial consumption. During the production order posting, if there's an insufficient quantity of the original component but a substitute item is available, users can seamlessly perform unplanned consumption. This allows the completion of the production order even when consumption entries exist for the original component.

By utilizing this capability, the **Production Order Status** transitions to *Finished* with backward flushing, ensuring seamless order completion. For successful execution, the finished item should have both BOM, and the component to be substituted must be configured with the option for unplanned consumption. This feature streamlines the production processes by enabling you to manage shortages efficiently, ensuring production orders are completed despite insufficient original component quantities.

Unplanned Output

If, during the execution of a production order, an unplanned output arises, an extra production order line needs to be created for this unexpected output. Via the function Add Unplanned Output, this extra production order line can be created. Via this function, it is only allowed to add new lines for item/variant combinations that are set up as Unplanned Item and Variant in the table Unplanned Output and Consumption Setup.

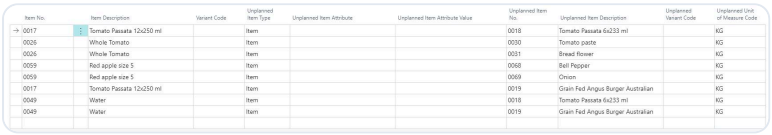
It's possible to add unplanned output items to a production order. The setup is different from the unplanned consumption, but you have to assign the allowed unplanned items in the same manner.

Setup Unplanned Output

A setup table is needed to assign item numbers/ variant codes that are allowed to use for the function Add Unplanned Output.

Select the Search icon , enter **Unplanned Output Setup** and then choose the related link.

The **Unplanned Output Setup** page opens.



With this setup, it's specified which (unplanned) output items are allowed to add as an extra production order line.

An unplanned item can be set up based on the item number or set up with a specific item attribute.

Unplanned Output in the production process

If during the execution of a production order unplanned output arises an extra production order line should be created for this unexpected output. Via the Add Unplanned Output function, this extra production order line can be created. Via this function, it is only allowed to add new lines for the item/variant combinations that are set up as Unplanned Item and Variant in the table Unplanned Output and Consumption Setup. In this way, a co-product can be added to the production order on the fly.

1. Select the Search icon , enter **Released Production Orders** and then choose the related link.
   The **Released Production Orders** list page opens.
2. Select the required **No.**
   The **Released Production Order** page opens.
3. On the **Lines** FastTab, select the production order line for which extra unplanned output must be added.
4. On the action bar, select **Line** > **Add Unplanned Output**.
   This function can be used in the Shop Floor Production extension as well.
   The **Add Unplanned Output** page opens.

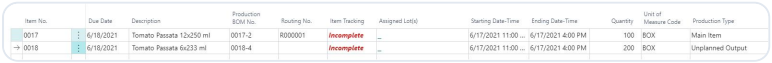
5. In the **Unplanned Item No.** field, select the AssistEdit button to select the required item number.

   Based on the specified unplanned item number, the system retrieves the value in the **BOM for Unplanned Output** field, displaying the BOM from the **Unplanned Output Setup** page. This allows you to assign a specific BOM to an unplanned output item in a released production order.

6. Select **OK**.
7. Enter **Quantity**.
8. Turn on the **Exclude from Consumption Reallocation** toggle to exclude consumption reallocation for this unplanned output.
   > [NOTE!]
   > The system does not display an error in the following scenarios when the **Exclude from Consumption Reallocation** toggle on the **Add Unplanned Output** page is turned on.
   > - If no co-product BOM exists for the unplanned output item.
   > - When no record is created in the consumption reallocation item for the unplanned output item.
   > - When you finish the production order, even if the unplanned output item does not have consumption reallocation entries.
   > - While posting journals for both the main item and unplanned output items.
   > - When you add an unplanned output item on the **Add Unplanned Output** page.
9. Select **OK**.
   Before creating an additional production order line for the unplanned output item 0018, the system checks whether the production BOM assigned to the item includes one or more lines where the **Reallocate Consumption from Main Item** checkbox is selected.

> **Note**
>
> You can use the **Add Unplanned Output** action for accurate item reallocation and consumption when processing production orders with the main BOM containing a phantom BOM.

Each combination of the item number, variant code, and unit of measure must be present in the production component lines of the production order of the main item.
If this check succeeds, a second production order line is created for the unplanned output item 0018. The production order line contains the same starting and ending timestamps as the first production order line. The Production Type field has been filled in with Unplanned Output because the production order line is created due to unplanned output. The first production order line is then changed to Main Item. No Production Component lines are created for the Production BOM lines with the Reallocate consumption from Main Item setting enabled.



10. On the **Lines** FastTab, select production order line with *Main Item* as **Production Type**.
11. On the action bar, select **Line** > **Consumption Reallocation Item**.

The **Consumption Reallocation Item** page opens.
For each Item No./Variant code that was marked as Re-allocate consumption from Main item= Yes in the used

Production BOM in the production order line for the Unplanned Output item, a line is created in the Consumption Reallocation item, together with an extra line for the same Item No./Variant code linked to the Main Item
12. On action bar, select **Change Status**.
If the status of a released production order is changed to Finished, the actual posted consumption of the Reallocation item needs to be proportionally allocated to the Main item and the Unplanned Output item. This correction needs to be executed via posting of extra consumption journal lines. Because the posting of these extra consumption journal lines can run in unexpected errors, it must be possible to skip the posting of these extra journal lines when changing the status of a released production order to Finished. The toggle Skip Reallocation Consumption Correction specifies if the production order must be finished without creating and posting extra consumption journal lines for the reallocation item.
13. Turn off the **Skip Reallocation Consumption Correction** toggle.
14. Click **Yes**.

After finishing the production order, extra consumption journal lines are automatically created for the reallocation item. For more information about the calculation and posting of these extra consumption journal lines, see Co-Products.

You can also use catch weight item in unplanned output on integration of the Aptean Process Manufacturing extension with the Aptean Catch Weight extension. To know more, see here.

> **Note**
>
> When an unplanned output item is added to the released production order line, the system automatically updates the **Lot Production Date** field with the current work date. This occurs when the **Lot Production Date** field value is part of the lot number (when the Aptean Lot Management extension is installed) or the expiration date field values (when the Aptean Expiration Management extension is installed).

BOM for unplanned output

You can add the BOM to apply on the **Unplanned Output Setup** page to enable the application of different BOMs with setups for different reallocation items for the same unplanned output item.

To enable the reallocation of BOMs in production, configure the **BOM for Unplanned Output** field by following these steps:

1. Select the Search icon  , enter **Unplanned Output Setup**, and then choose the related link.

   The **Unplanned Output Setup** page opens.
2. Fill in the required fields.
3. In the **BOM for Unplanned Output** field, select the production BOM header from the available options.
   The **BOM for Unplanned Output** field is editable only if the **Unplanned Item Type** is set to *Item*.

If this field is empty, the system automatically selects the production BOM number on the **Item Production Scenarios** page for the unplanned output item when adding it to a released production order.

4. In the **Unplanned Variant Code** field, select the variant code for the unplanned output item.
   The system automatically populates the description of the selected variant in the **Unplanned Item Description** field. If no value is specified, the description is retrieved from the item.
5. Select the **Exclude from Consumption Reallocation** checkbox to exclude all BOMs in the **BOM for Unplanned Output** field on the **Unplanned Output Setup** page. If the checkbox is cleared, only BOMs with co-products can be selected.

> **Note**
>
> - The dropdown options only display the production BOMs with the **Co-Product BOM** toggle turned on from the **Production BOM** page.
> - Ensure that the selected production BOM matches the requirements for reallocating unplanned output items.
> - Ensure that the same production BOM is used for any combination of item, variant, unplanned item, and unplanned variant on the **Unplanned Output Setup** page, regardless of the **Unplanned Unit of Measure Code** field value. The production BOM must remain consistent for the same combination. If it is changed, the system displays a confirmation message and automatically updates all other lines with the same combination accordingly.

Access BOM for unplanned output during production

In the production process, you can configure and use the BOM for unplanned output items, which includes related functionalities such as filtering BOMs and assigning BOMs with correct versions.

1. Open the **Released Production Order** page.
2. Fill in the required fields.
3. On the **Lines** FastTab, select **Line** > **Add Unplanned Output**.
   The **Add Unplanned Output** page opens.
4. In the **Unplanned Item No.** field, select the AssistEdit button to select the required item number.

Based on the specified unplanned item number, the system retrieves the value in the **BOM for Unplanned Output** field, displaying the BOM from the **Unplanned Output Setup** page.
This allows you to assign a specific BOM to an unplanned output item in a released production order.

Additionally, the BOM value for the unplanned output item, based on the **Unplanned Output Setup** page, is displayed in the **Production BOM No.** field on the **Lines** FastTab of the production order.

When an unplanned output item is added to a released production order, the system ensures that the correct active BOM version is applied. If multiple versions exist for the unplanned output BOM, the system automatically selects

the active version based on the **Posting Date** field of the production order. For more information on the BOM version, see Create a new production BOM and BOM version.

Production Variances

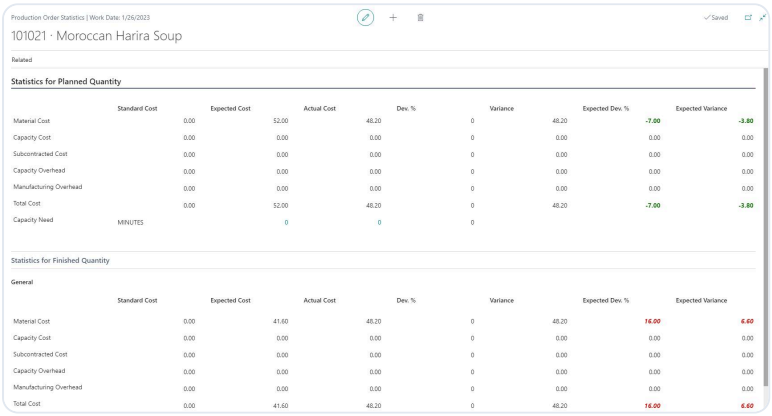
Article • 4/3/2023 • 4 min read

In standard BC, the production order statistics calculate the variance and deviation between the Standard Cost and the Actual Cost. However, when the actual cost isn't used, the variance between it can't be seen.

The Variance and Deviation between the Expected Cost and Actual Cost are added. This is useful if you want to do a variance analysis.

View Production Variances

1. Navigate to the desired **Released Production Order** page.
2. On the action bar, select **Related** > **Order** > **Other** > **Statistics**.
   The **Production Order Statistics** page opens.



   The Expected Cost is the cost according to the component lines and the routing in the production order.
   The Expected Dev. % is the deviation between actual and expected.
   The production order statistics of standard BC are always calculated based on the planned quantity, but if you produce more or less, you don't have a proper variance. Therefore, the Statistics for the Finished Quantity are added. In this case, the production order statistics for the finished quantity are not favorable since it is used more than planned.
3. On the action bar, select **Related** > **Production Variances**.
   The **Material and Capacity Cost Details** page opens.
   The expected quantity is shown based on the finished output quantity that's expected from the components and time. It also shows what's actually posted and the deviation in percentage and quantity.

> **Note**
>
> The system will perform the calculation for the **Expected Quantity** field on the routing line using the following formula:
> Expected Quantity = Setup Time + (Run Time × Finished Qty.).

Based on the type of variance, you can view the associated **Item Ledger Entries** for the output or consumption items and **Capacity Ledger Entries** for work or machine centers.

- If the **Variance Type** is *Empty*, you can view the **Item Ledger Entries** with the *Output* entry type by clicking the **Actual Quantity** field.
- If the **Variance Type** is *Material*, you can view the **Item Ledger Entries** with the *Consumption* entry type by clicking the **Actual Quantity** field.
- If the **Variance Type** is *Capacity*, you can view the **Capacity Ledger Entries** of the corresponding Machine or Work Center by clicking the **Actual Quantity** field.

4. On the action bar, select **Shop Floor Production Status**.
   The **Shop Floor Production Status** page opens.
   You can view the status of any released production order. It gives an overview and the latest routing status regarding the associated released production order.
5. On the action bar, select **Show Time Entries**.
   The **Shop Floor Production Time Entries** page opens.
   The time entries for the associated Work Centre or Machine Center are displayed.
   You can also manually create time entries for released production orders on the **BC Time Entries** FastTab. For more information, see Shop floor production time entries.

> **Note**
>
> If the Work Centre's **Labor** toggle is turned on for the selected line on the **Material and Capacity Cost Details** page, the system displays the time entries according to the linked **Routing Line Labor Cost** field in the applied Routing.

Production BOM Cost Shares Setup

Article • 8/5/2025 • 4 min read

You can configure the Routing/Version and Overhead that will be used for costing analysis relative to a particular Production BOM Version.

1. Select the Search icon  , enter **Production BOM** and then choose the related link.
   The **Production BOMs** list page opens.
2. Select the required **No.**
   The **Production BOM** page opens.
3. On the action bar, click **More options** > **Actions** > **Production BOM Cost Share Setup** to check the values regarding that BOM.
   The **Production BOM Cost Share Setup** page opens
4. The **Production BOM No.** field is automatically populated with the appropriate number.
5. In the **Production BOM Version No.**, **Routing No.**, and **Routing Version Code** fields, select the desired value from the list.
6. In the **Overhead Rate** field, enter the value.
   The drop down menu on the Production BOM Version No. field shows only the records available under the selected Production BOM No.
   Similarly, when a value is entered in the **Routing No.** field, only the records available under that **Routing No.** are available in the dropdown menu in the **Routing Version Code** field.
7. On the **Production BOM** page, on the action bar, select **Versions** to open the **Prod. BOM Version** List that contains all the versions of that **Production BOM**.
8. Select the required **Version Code** to open the **Production BOM Version** page.
9. On the action bar, select **Actions** > **Production BOM Cost Share Setup**.
10. On the **Production BOM Cost Share Setup** page, on the **General** FastTab, the **Production BOM No.** and **Production BOM Version No.** is filled in automatically.
11. Enter the **Routing No.**, **Routing Version Code**, and **Overhead Rate**.

> **Note**
>
> When creating a new **Production BOM**, while using the **Copy BOM** function to copy an existing production BOM to quickly create a similar BOM, the **Production BOM Cost Share Setup** is created automatically with the values available in the source **Production BOM**. However, the **Production BOM Version No.** is blank.

To copy BOM version

1. Navigate to the desired **Production BOM** page.
2. On the action bar, select **Versions**.
   The **Prod. BOM Version** list page opens.
3. On the action bar, select **New**.
   The **Production BOM Version** page opens.
4. Fill in the required details.
5. On the action bar, select **Copy BOM Version** to copy an existing production BOM version to quickly create a similar BOM.
   The **Prod. BOM Version** list page opens.
6. Select the required **Version Code** from the list.
7. In the **Default Scrap Inclusion Mode** field, select the default value for the **Scrap Inclusion Mode** field on the **Production BOM** pages.
   The available options are: *Include* and *Exclude*
8. In the **Product Yield** % field, enter a value within the range configured in the **Minimum Product Yield** % field.
   The default value is set to *100*. You can add this field using personalization.
   If the **Scrap** % field value on the **Process Manufacturing Setup** page is configured, the **Product Yield** % field value is updated within that range.
   The data is copied from the specific version and can be verified on the **Production BOM Cost Shares Setup** page.

> **Note**
>
> You can modify or assign the **Production BOM Version Code** on the **Production BOM Cost Share Setup** page.

Independent BOM Cost Share Distribution Report

Article • 1/24/2024 • 4 min read

The **Independent BOM Cost Share Distribution Report** is similar to the **BOM Cost Share Distribution Report**. It allows calculation in relation to a **Production BOM** or **Version** independent of any item record. The **Independent BOM Cost Share Distribution** report includes the component lines when the production BOM/production BOM version lines have the **Production BOM** type.
It will use the Routing/Version/Overhead as per the **Production BOM Cost Shares Setup** record for the respective BOM **Version**.

1. Navigate to the desired **Production BOM** page.
2. On the action bar, select **Actions**> **Independent BOM Cost Share Distribution Report**.
   The **Independent BOM Cost Share Distribution** page opens.
3. On the **Options** FastTab, in the **Show Cost Shares as** and **Show only** fields, select an option from the dropdown.
4. Turn on the **Include Details** toggle
5. On the **Filter: Production BOM Line** FastTab, in the **Production BOM No.** and **Version Code** fields, select the required number from the list.

> **Note**
>
> The **Production BOM No.** is filled in automatically when opening the **Independent BOM Cost Share Distribution** from the **Production BOM** page.

1. Click **Preview & Close** to generate report.
   Along with the standard data, the report also consists of the **Routing No.**, **Routing Version No.** and **Overhead Cost** from the **Production BOM Cost Share Setup** data.

To generate report for specific BOM No. and version code

1. Navigate to the desired **Production BOM** page.
2. On the action bar, select **Home** > **Versions**.
   The **Prod. BOM Version List** page opens.
3. Select the required **Version Code** to open the **Production BOM Version** page.
4. On the action bar, select **More options** > **Actions** > **Independent BOM Cost Share Distribution**.
   The **Independent BOM Cost Share Distribution** page opens.
5. On the **Filter: Production BOM Line** FastTab, the **Production BOM No.** and **Version Code** fields are automatically populated.
6. Select **Preview & Close** to generate report.
   The report is generated for the specific **Production BOM No.** and the **Version Code**.

To generate report with multiple BOM Nos.

1. Select the Search icon  , enter **Independent BOM Cost Share Distribution** and then choose the related link.
2. On the **Filter: Production BOM Line** FastTab, in the **Production BOM No.** field select multiple BOM Nos.
3. Select **Preview & Close** to generate report.

A single report is generated for all the Production BOM Nos. and versions in that BOM.

> **Note**
>
> All the lines on each Production BOM are created on the same page of the report. When multiple Production BOMs are considered, the lines on each Production BOM are created on individual pages. When the Version Code is also entered, the report generates lines based on the Production BOM Version lines.

Production Completion Analysis Report

Article • 7/27/2023 • 3 min read

The Production Completion Analysis Report provides a summary of completed production orders. You can use it to check that all output and consumption entries have been posted, and also review any variances between the expected and actual output/consumption.

1. Select the Search icon  , enter **Production Completion Analysis**, and then choose the related link.
   Alternatively, on the **Change Production Order Status** page, on the action bar, select **Report** > **Production Completion Analysis**.
   The **Production Completion Analysis** page opens.
2. On the **Options** FastTab, fill in the following fields:

Field	Description
Production Variance % Filter	Highlight any production order lines where the actual output varies from the expected output by a percentage within the range defined here.
Component Variance % Filter	Highlight any component lines where the actual consumption varies from expected consumption (adjusted for actual output) by a percentage within the range defined here.
Capacity Variance % Filter	Enter the percentage value to filter variances between actual and expected capacity. After running the report, routing lines with variance percentages outside the specified range will be listed and highlighted by comparing actual capacity consumption against the standard capacity.
Exclude Scrap From Variance	Controls whether the defined scrap percentage should be excluded when calculating the component variance.

3. On the **Filter: Prod. Order Line** FastTab, fill in the following fields to filter Production Order records:
   - Prod. Order No.
   - Item No.
   - Location Code
   - Due Date
   - Starting Date
4. Select **Preview** to generate the report.

Cost Breakdown in Matrix per Version

Article • 4/3/2023 • 1 min read

The user can see the differences between the Prod. BOM Components using the **Matrix per Version** page. Along with that, the user can also see the breakdown of costs for each version and ultimately a single 'Total Cost/LB' (or KG) for each BOM Version using the **Cost Matrix per Version** page.

1. Navigate to the desired **Production BOM** page.
2. On the action bar, select **Actions** > **Cost Matrix per Version**.
3. The **Prod. BOM Cost Matrix per Version** page opens.
4. On the **Options** FastTab, in the **Cost per Unit Based On** field, select an option from the dropdown.
5. On the action bar, select **Show Matrix**.
   The **Prod. BOM Cost Matrix per Version Matrix** page opens.
   The results of the matrix will list all the components and their quantities along with the newly added features in a new section of rows.

Production Split Worksheet

Article • 9/24/2025 • 7 min read

You can split a production order line into multiple orders or multiple lines within the same production order. The **Production Split Worksheet** page displays the information related to the production order you choose. You can split the current record by entering the number and quantities of new records you want to create.

> **Note**
>
> You cannot split a production order line that has posted Consumption, Capacity, or Output entries. Also, the production order line that has Reservation entries cannot be split.

You can split production orders even after the production has started and partial output has been posted. The system allows you to split the remaining quantity into new production orders, provided that the split does not reduce the remaining quantity below the finished quantity.

For example, if a released production order is created for a quantity of 10, and 4 units are reported as finished, you can split the remaining 6 units into two new production orders of 3 units each. When the split is confirmed, the system updates the original production order quantity to match the finished quantity and creates new production orders for the remaining split quantities.

This page displays the production scenarios that are assigned with the inventories in the production orders. These production scenarios are filtered based on the location code, variant code, the unit of measure code in the production order line.

> **Note**
>
> If the production scenarios are not setup for the item in the production order line, you cannot open the **Production Split Worksheet** page.

You can open the **Production Split Worksheet** page from the following pages:

- Released Production Order
- Firm Planned Prod. Order
- Work Center Task List
- Machine Center Task List

To split the single production order line into multiple production orders or multiple lines

1. Select the Search icon  , enter **Released Production Orders**, and then choose the related link.
   The **Released Production Orders** list page opens.
2. Select the required **No.**
   The **Released Production Order** page opens.
3. On the **Lines** FastTab, select **Functions** > **Production Split Worksheet**.
   The **Production Split Worksheet** page opens.
4. In the **No. of New Records** field, enter the number of new records that you want to create.
5. In the **Quantity Per New Record** field, enter the quantity that every new record should contain.
6. On the **Production Scenarios** FastTab, select the checkbox in the **Include** field for the production scenarios you want to assign to the new records. The checkbox in this field is automatically selected if the production scenario code is selected in the production order line.

> **Note**
>
> The checkbox must be selected for at least one production scenario record. If multiple production scenario records are selected, it will automatically alternate the split lines between the selected production scenarios.

7. On the action bar, select **Actions** > **Functions**.
   a. **Calculate Split Plan**: Select this action to split the current record into new records.
      The **Calculate Split Results** page opens.
      On the **General** FastTab,
      i. In the **Split Method** field, select the **Line** or **Order** option based on the method you want to split. If you select the **Line** option, the current record will be split into multiple lines in the same production order. If you select the **Order** option, the current record will be split into new production orders.

> **Note**
>
> You should select the **Order** split method if the production order has multiple lines.

      ii. Turn on the **Use Suffix** toggle to add a suffix and use the existing production order number.
      If this toggle is turned off, it will assign new production order numbers based on the No. Series assigned on the **Manufacturing Setup** page. The No. Series should have the **Manual Nos.** checkbox selected.

> **Note**
>
> The **Use Suffix** field is editable only when you choose the **Order** split method.

iii. In the **Starting Suffix** field, enter the number you want to use as a suffix for the first production order in the split line. The next production orders will follow the sequence based on this value. You can enter any value between 01 to 99. For example, if you enter 5 in this field, the new production orders will have the suffix sequence 05, 06, 07, 08, and so on.

> **Note**
>
> It will show an error when the suffix sequence exceeds 99.

iv. In the **Separator** field, enter the character that you want to use to separate the new production order numbers and the suffix.

> **Note**
>
> The **Starting Suffix** and **Separator** fields are displayed only when you enable the **Use Suffix** toggle.

v. In the **Copy Setup Time on Split to** field, select the required option from the following list to control how the routing setup time is applied to the resulting lines.

Option	Description
None	The routing setup time is not updated for any of the lines.
First New Line	If the **Split Method** field is set to *Line*, the routing setup time is updated for the first line. If the **Split Method** field is set to *Order*, the routing setup time is updated for the first production order.
First New Line per Prod. Scenario	If the **Split Method** field is set to *Line*, the routing setup time is updated only for the first line in each production scenario. If the **Split Method** field is set to *Order*, the routing setup time is updated only for the first production order in each production scenario.
All New Lines	The routing setup time is updated for all the lines.

vi. Click **OK**.

You can see the suggested split plan on the **Split Plan** FastTab. You can also make changes before

accepting the plan.

b. **Accept Split Plan**: Select this action to create the production orders/lines based on the plan in the **Split Plan** FastTab.
When you choose the **Order** split method,

i. If the sum of the quantities in the split plan is equal to or greater than the quantity in the existing production order line, it will delete the existing production order and create new production orders.

ii. If the sum of the quantities in the split plan is lesser than the quantity in the existing production order line, it will create the new production orders and update the remaining quantity in the existing production order for the difference.
When you choose the **Line** split method,

iii. If the sum of the quantities in the split plan is greater than the quantity in the existing production order line, it will delete the existing production order line and update the quantity in the production order header when creating the new lines in the existing production order.

iv. If the sum of the quantities in the split plan is equal to the quantity in the existing production order line, it will delete the existing production order line and create new lines in the existing production order.

v. If the sum of the quantities in the split plan is lesser than the quantity in the existing production order line, it will update the remaining quantity in the existing production order line and create the new lines in the existing production order.

c. **Clear Split Plan**: Select this action to delete all the records on the **Split Plan** FastTab.

Integrations

Article • 9/24/2025 • 1 min read

The Aptean Process Manufacturing extension has been integrated with the following extensions:

- Aptean Catch Weight
- Aptean Production Scenarios
- Aptean Shop Floor Logistics
- Aptean eSignature
- Aptean Essentials

Aptean Catch weight

Article • 4/29/2023 • 5 min read

While using the Aptean Process Manufacturing extension in conjunction with the Aptean Catch Weight extension, the Catch Weight Items can be added:

- As a Co-Product on the Production BOM
- As a Reallocate consumption of a Co-product
- As an Unplanned Output Setup
- As a Reallocate consumption of an Unplanned Output
- As an Unplanned Consumption item
- For Consolidated Pick
- For Consolidated Consumption

Use Catch Weight Item as a Co-Product

A Catch Weight item now can be used a Co-Product in Production BOM. Follow the instructions here to add an item as a Co-product.

Reallocate consumption of a Co-product

When a released production order is marked as *Finished*, the system automatically generates Item Ledger Entries for both the main item and the co-product. If a **Catch Weight** item is used as a shared component, the Quantity and Invoiced Quantity on the **Item Weight Ledger Entry** page are calculated using the Consumption Pro Rata of the co-product on the **Consumption Reallocation Item** page. Also, the **Act. Consumption (Qty.)** field on the Item Ledger Entry is updated with the correct consumed component and the **Act. Consumption (Weight Qty.)** field on the finished Production Order Components line is updated with corresponding entries. The **Act. Consumption (Weight Qty.)** field is viewed only when catch weight items are used as co-product.

Use Catch Weight Item in Unplanned Output Setup

You can now add Catch Weight items on the **Unplanned Output Setup** page. This unplanned output can then be added to the Released Production Order.

The **Item No.**, **Unplanned Item Type**, and **Unplanned Item No.** fields on the **Unplanned Output Setup** page can be updated with the desired Catch Weight Item details. When the output is posted, the corresponding Item Ledger Entries and Item Weight Ledger Entries are created automatically.

Reallocate consumption of an Unplanned Output

You can reallocate consumption of an Unplanned Output in a manner similar to the Co-product. For more information, see Reallocate consumption of a Coproduct.

Use Catch Weight Item as an Unplanned Consumption item

A Catch Weight Item can now be used as an Unplanned Consumption item. Follow the instructions here to add an item on the Unplanned Consumption Setup page.

> **Note**
>
> Consumption Posting on a production component line created with a Catch Weight Item through Add Unplanned Consumption function works similarly to the consumption posting of a component line with a Catch Weight Item created via Refresh production order.

Use Catch Weight Item in Consolidated Pick

A Catch Weight Item can now be used in Consolidated Pick. You can set up the Consolidated Pick Method for a Catch Weight Item on the **Item Card** page and **Stockkeeping Unit Card** page. The consolidated pick method for a Catch Weight Item on the **Production Order Components** page is also set up, as the value is inherited from the associated item or Stockkeeping Unit Card page. If the Consolidated Pick Method value is not set on the item card or Stockkeeping Unit Card page for the item, you can set it directly on the Production Order Component line. For more information on how to add a catch weight item for consolidated pick, see Consolidated Pick and Consolidated Consumption.

Use Catch Weight Item in Consolidated Consumption

A Catch Weight Item can now be used in Consolidated Consumption. You can set up the Consolidated Consumption method for the Catch Weight Item on the **Item Card** page and **Stockkeeping Unit Card** page. The consolidated consumption for a Catch Weight Item on the **Production Order Components** page is also set up as the value is inherited from the associated item or Stockkeeping Unit Card page. If the Consolidated Consumption value is not set on the item card or Stockkeeping Unit Card page for the item, you can set it directly on the Production Order Component line. For more information on how to add a catch weight item for consolidated pick, see Consolidated Pick and Consolidated Consumption.

Updating the Weight Quantity fields in the Consolidated Consumption report

The weight quantity fields are updated on the Consolidated Consumption report page when a Catch Weight Item is used. To know more about the calculation of Consolidated Consumption and generation of the report, see Consolidated Consumption. The following weight fields are added to the existing fields on the report page:

Field	Description
Unit of Measure (Weight Qty.)	Displays the catch weight unit of measure. It is expressed in kg.
Consolidated Consumption (Weight Qty.)	Displays the total consumption quantity of the raw material in weight (kg) consumed during the production of the finished product. It is the product of the Calculated Consolidated Consumption Quantity and the Average Catch Weight of the item.
Normative Consumption (Weight Qty.)	Displays the total consumption quantity of raw material in weight (kg) assumed to be consumed to produce the finished product. It is the product of Calculated Normative Consumption quantity and Net Weight of the consolidated item.

Note

These fields are visible only when the finished product or the consumed component is a catch weight item.

You can also view the **Weight Quantity (KG)** field value on the Item Tracking Lines of the Consumption Journal when a catch weight item is used in consolidated consumption. The Document Weight Lines are also created for the consumption lines on the Consumption Journal page.

Aptean Production Scenarios

Article • 4/23/2025 • 3 min read

While using the Aptean Process Manufacturing extension in conjunction with the Aptean Production Scenarios extension, you can produce batches either manually or automatically using different batch optimization methods between the minimum and maximum batch sizes mentioned in the associated production scenario.

On the **Item Production Scenario** page, the following fields are added.

Field	Description
Minimum Batch Size	Specifies the minimum batch size when calculating the variable batch size for a production order using the **Optimize Batches** function associated with the selected item production scenario.
Standard Batch Size	Specifies the standard batch size used for the optimization calculations when using optimize batches within a production order. The standard batch size should match the lot size established for the routing associated with the selected production scenario.
Maximum Batch Size	Specifies the maximum batch size when calculating the variable batch size for a production order using the Optimize Batches function associated with the selected item production scenario.
Optimization Method	Specifies how batch optimization is to be calculated. This value is inherited from the **Default Optimization Method** field from the **Process Manufacturing Setup** page.
Automatic Optimization	Select this checkbox to use this production scenario for automatic batch optimization.
Automatic Run Time Optimization	Select this checkbox to use the values related to run time when this production scenario is used for automatic batch optimization.
Run Time Per Batch	Specifies the run-time allocated to a single batch. Depending on the routing setup, this may influence the calculated run time for the production order line, resulting in the overall run time being determined by the number of batches rather than the individual units.
Send-Ahead Batches	Enter the number of batches you wish to move to the next operation to prevent batch overlap. This value is defaulted to the **Send-Ahead Batches** field on the production order line when this production scenario is used.
Base Batch Run Time UoM	Specifies the default value of the **Base Batch Run Time** UoM field from the **Process Manufacturing Setup** page.

> **Note**
>
> Initially, the **Default Optimization Method** dropdown value on the **Process Manufacturing Setup** page will populate the **Optimization Method** field on the **Item Production Scenario** page. You can change the optimization method here, which will be reflected in the **Batch Optimization Method** field on the **Optimize Batch Size** page.

You can process co-products to view the routing number of the released production order after refreshing the production order. To know more see Co-product routing.

Aptean Shop Floor Logistics

Article • 8/27/2025 • 1 min read

When the Aptean Process Manufacturing extension is integrated with the Aptean Shop Floor Logistics extension, the **Shop Floor Activities** page from this extension supports the planning in the warehouse and shows an overview of all outstanding warehouse activities. The consumption of a released production order can contain an outstanding warehouse activity. However, when the released production order only contains production component lines that need to be picked in a consolidated manner, this warehouse request won't be shown on the **Shop Floor Activities** page as the consumption should be handled with a consolidated pick instead.

On the **Input** page of the shop floor, component items of unplanned output items are excluded from the production order when the **Exclude from Consumption Reallocation** toggle is turned on.

Aptean eSignature

Article • 8/27/2025 • 1 min read

When the Aptean Process Manufacturing extension is used in conjunction with the Aptean eSignature extension, the system ensure manufacturing documentation goes through mandatory digital signatures on critical documents and approval workflows.

Aptean Essentials

Article • 9/24/2025 • 1 min read

When the Aptean Process Manufacturing extension is used in conjunction with the Aptean Essentials extension, unplanned consumption lines are automatically added to production order components, with rounding handled according to the essentials setup.