

17. Drag & Relate

Produmex Manufacturing extended the standard SAP Business One drag&relate feature with the following reports specialized for manufacturing:

1. BoM Tree
2. BoM Tree without Operations
3. BoM Usage
4. Production Material Requirements
5. Material Account Grid
6. Material Account Diagram
7. Operations Sequence Diagram
8. Job Requirements Report
9. Allocation Status

17.1. BoM Tree

To see the complete BoM of a product, grab the item code, place it on the 'BoM Tree' line, and then click on 'BoM Tree'. If the grabbed item has a BoM, the BoM Tree View report will open.

The report lists every BoM element of the dropped item. If the Bill of Materials contains an assembly material or a phantom item, the BoM of the assembly material/phantom item will be shown as well. Assembly lines can be collapsed and expanded.

The following information is displayed:

- *Item Code*: This field contains an icon that indicates the role of the item in the BoM and the item code.
- *Item Name*: The description of the item.
- *Base Quantity*
- *Quantity*
- *UoM*
- *Is MTO*: Indicates whether the item will be considered for MTO planning or not.

| BoM Tree View | | | | | | |
|---------------|------------------------|---------------|----------|------|--------|---|
| Item Code | Item Name | Base Quantity | Quantity | UoM | Is MTO | |
| p1001-1 | Sports Bike | 1.000 | 1.000 | | | |
| mM1001 | Painted Bike Framework | 1.000 | 1.000 | pcs | | ✓ |
| mM1101 | Raw Bike Framework | 1.000 | 1.000 | pcs | | ✓ |
| m1 | 5m Steel Pipe | 1.000 | 1.000 | pcs | | ✓ |
| oPCU | Cutting | 40.000 | 40.000 | min | | |
| m2 | Steel Pipe | -2.000 | -2.000 | m | | ✓ |
| oPWE | Welding | 40.000 | 40.000 | min | | |
| oPPD | Painting and Drying | 20.000 | 20.000 | min | | |
| m3 | Chain | 1.000 | 1.000 | pcs | | |
| m4 | Wheel | 2.000 | 2.000 | pcs | | ✓ |
| oPA5 | Bike Assembly | 180.000 | 180.000 | min | | ✓ |
| cOST1 | Project Management | 1.000 | 1.000 | | | |
| uP1001-0 | Red Bike (Basic) | -1.000 | -1.000 | pcs | | |
| uP1001-0 | Red Bike (Basic) | 1.000 | 1.000 | pcs | | |
| oPQA | Quality Assurance | 3.000 | 3.000 | min | | |
| m5 | Bell | 1.000 | 1.000 | pcs | | ✓ |
| m6 | Screw 8mm (Nut + Bolt) | 1.000 | 1.000 | pair | | ✓ |
| oPBI | Bell Installation | 5.000 | 5.000 | min | | ✓ |
| cOST2 | Energy | 1.000 | 1.000 | | | |

17.2. BoM Tree without Operations

To see the complete BoM of a product without operations, grab the item and drop it on the 'BoM Tree without Operations' line, then click on the line. If the grabbed item has a BoM, the BoM Tree without Operations report will open.

The report lists every element of the item's Bill of Materials, except the operations. If the Bill of Materials of the dropped item contains an assembly material or a phantom item, the BoM of the assembly material/phantom item will be shown as well. Assembly lines can be collapsed and expanded.

| BoM Tree without Operations | | | | | | |
|-----------------------------|------------------------|---------------|----------|------|--------|---|
| Item Code | Item Name | Base Quantity | Quantity | UoM | Is MTO | |
| p1001-1 | Sports Bike | 1.000 | 1.000 | | | |
| mM1001 | Painted Bike Framework | 1.000 | 1.000 | pcs | | ✓ |
| mM1101 | Raw Bike Framework | 1.000 | 1.000 | pcs | | ✓ |
| m1 | 5m Steel Pipe | 1.000 | 1.000 | pcs | | ✓ |
| m2 | Steel Pipe | -2.000 | -2.000 | m | | ✓ |
| m3 | Chain | 1.000 | 1.000 | pcs | | |
| m4 | Wheel | 2.000 | 2.000 | pcs | | ✓ |
| cOST1 | Project Management | 1.000 | 1.000 | | | |
| uP1001-0 | Red Bike (Basic) | -1.000 | -1.000 | pcs | | |
| uP1001-0 | Red Bike (Basic) | 1.000 | 1.000 | pcs | | |
| m5 | Bell | 1.000 | 1.000 | pcs | | ✓ |
| m6 | Screw 8mm (Nut + Bolt) | 1.000 | 1.000 | pair | | ✓ |
| cOST2 | Energy | 1.000 | 1.000 | | | |

17.3. BoM Usage

To see the products that require the given item as a component, grab the item, place it on the 'BoM Usage' line, and then click on the line.

A product is listed on the opening BoM Usage form if its BoM contains the selected item.

If the item is a phantom item, the BoMs that contain the phantom item will be listed under the item.

The report can be used for materials, components, operations, by-products and costs.

The following information is displayed:

- *Item Code*: This field contains an icon that indicates the role of the item in the BoM and the item code.
- *Item Name*: The description of the item.
- *Base Quantity*
- *UoM*
- *Is MTO*: Indicates whether the item will be considered for MTO planning or not.
- *On hand*: The quantity in stock.
- *On order*: The ordered quantity.
- *Is committed*: The committed quantity.

| Item Code | Item Name | Base Quantity | Quantity | UoM | Is MTO | On hand | On order | Is committed |
|-----------|---------------|---------------|----------|-----|--------|---------|----------|--------------|
| oPAS | Bike Assembly | 1.000 | 1.000 | min | | 0.000 | 0.000 | 0.000 |
| mM1102 | Assembly | 0.006 | 180.000 | min | ✓ | 0.000 | 0.000 | 0.000 |
| Item01 | Batch nbr | 180.000 | 180.000 | min | | 2.000 | 17.000 | 1.000 |
| p1001-1 | Sports Bike | 0.006 | 180.000 | min | ✓ | 38.000 | 105.000 | 101.000 |
| p1001-2 | Red Bike_nos | 0.006 | 180.000 | min | ✓ | 0.000 | 0.000 | 0.000 |

17.4. Production Material Requirements

To see the list of production orders that require the given item as a material, open the Production Material Requirements report. Grab a component/material item, drop it on the 'Production Material Requirements' line, and then click on the line.

On the grid every open production order that contains the item as a material will be listed and linked.

Please note: If a material is not linked to an operation, it will not be listed.

The following information is displayed:

- *Pr.Ord.Line*: The production order line where the material is located.
- *Op.Beg.Date*: The begin date of the linked operation.
- *Op.Beg.Time*: The begin time of the linked operation.
- *Pr.Ord.Beg.Date*: The begin date of the production order.
- *Pr.Ord.Beg.Time*: The begin time of the production order.

- Qty.: The required quantity.

| Production Material Requirements | | | | | | |
|----------------------------------|-------------|--------------------|-------------|-----------------|-----------------|--------|
| Item Code | | mM1101 | | | | |
| Item Name | | Raw Bike Framework | | | | |
| Pr.Ord.No | Pr.Ord.Line | Op.Beg.Date | Op.Beg.Time | Pr.Ord.Beg.Date | Pr.Ord.Beg.Time | Qty. |
| 584 | 1 | 05/04/17 | 08:20 | 05/04/17 | 08:20 | 1.000 |
| 587 | 1 | 03/09/17 | 15:10 | 03/09/17 | 15:10 | 10.000 |
| 589 | 1 | 02/17/17 | 16:28 | 02/17/17 | 16:28 | 1.000 |
| 590 | 1 | 02/17/17 | 15:56 | 02/17/17 | 15:56 | 1.000 |
| 594 | 1 | 05/04/17 | 08:00 | 05/04/17 | 08:00 | 1.000 |
| 597 | 1 | 03/02/17 | 08:00 | 03/02/17 | 08:00 | 1.000 |
| 617 | 1 | 05/03/17 | 09:58 | 05/03/17 | 09:58 | 1.000 |
| 632 | 1 | 05/25/17 | 08:00 | 05/25/17 | 08:00 | 1.000 |
| 635 | 1 | 04/06/17 | 10:13 | 04/06/17 | 10:13 | 10.000 |
| 638 | 1 | 04/14/17 | 15:10 | 04/14/17 | 15:10 | 10.000 |
| 643 | 1 | 04/14/17 | 15:10 | 04/14/17 | 15:10 | 10.000 |
| 656 | 1 | 05/04/17 | 08:40 | 05/04/17 | 08:40 | 10.000 |
| 661 | 1 | 07/25/17 | 17:20 | 07/25/17 | 17:20 | 10.000 |
| 666 | 1 | 08/17/17 | 16:30 | 08/17/17 | 16:30 | 0.000 |

17.5. Material Account Grid

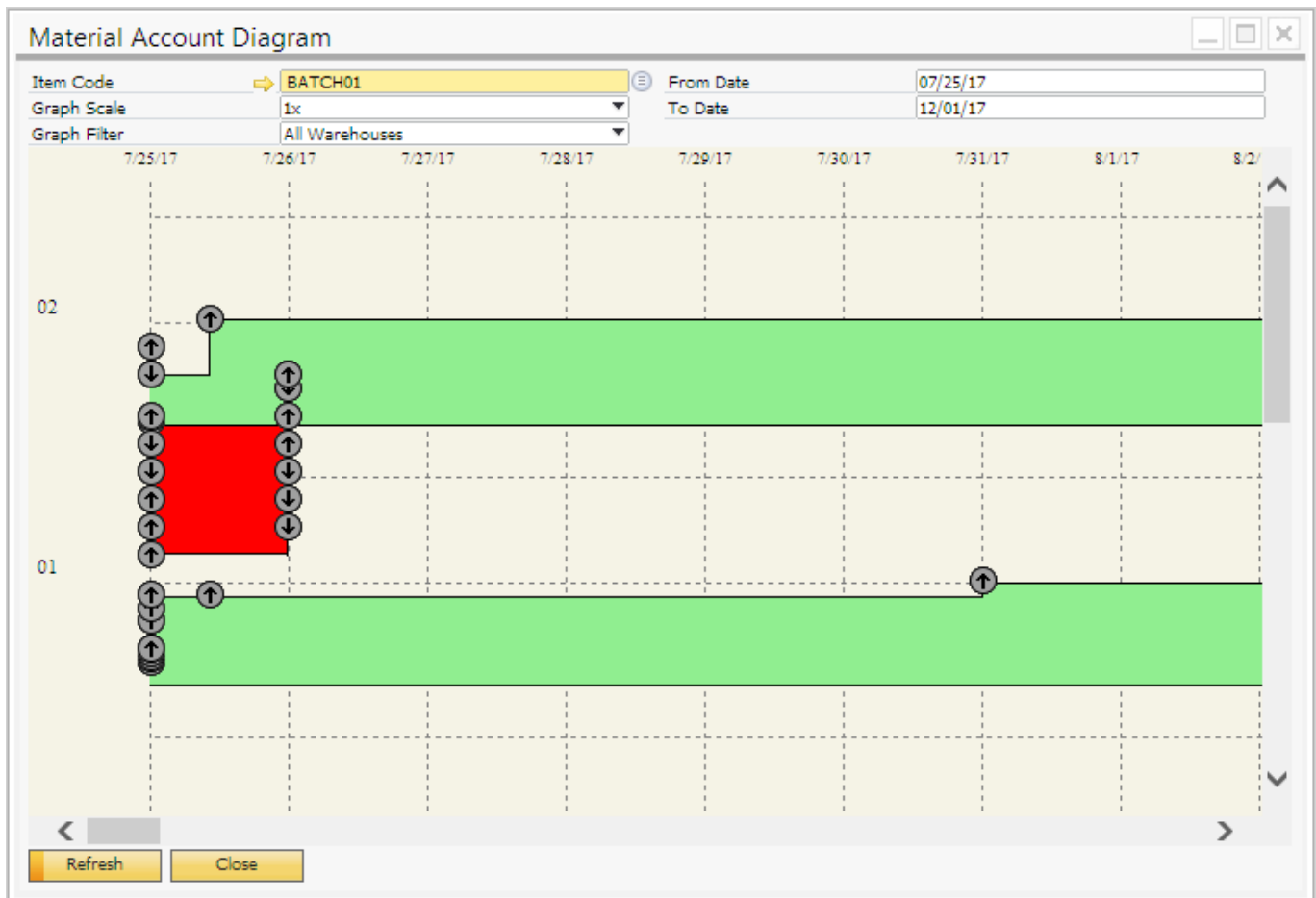
To see the incoming and outgoing inventory transactions of an item, open the Material Account Grid. Drag a non-operation item and drop it on the 'Material Account Grid' line, then click on the line. The 'Material Account Grid' form will open.

| Material Account | | | | | | | | | | |
|------------------|----------|-------------------|-----------|------------|-----------|----------|----------------|----------------|--------------------|----------------|
| Item Code | | BATCH01 | | | From Date | | 07/25/17 | | | |
| UoM | | | | | To Date | | 12/01/17 | | | |
| Due Date | Due Time | MRP Resource Type | Doc Entry | Doc Number | Doc Line | Quantity | Warehouse Code | Delta Quantity | Warehouse Quantity | Total Quantity |
| | 00:00 | Stock | 0 | 0 | 0 | 0.000 | 01 | 0.000 | 0.000 | 0.000 |
| | 00:00 | Stock | 0 | 0 | 0 | 20.000 | 02 | 20.000 | 20.000 | 20.000 |
| | 00:00 | Stock | 0 | 0 | 0 | 0.000 | 03 | 0.000 | 0.000 | 20.000 |
| | 00:00 | Stock | 0 | 0 | 0 | 0.000 | 04 | 0.000 | 0.000 | 20.000 |
| | 00:00 | Stock | 0 | 0 | 0 | 0.000 | 05 | 0.000 | 0.000 | 20.000 |
| 05/31/17 | 00:00 | Production Enter | 52 | 52 | 1 | 1.000 | 02 | 1.000 | 21.000 | 21.000 |
| 06/20/17 | 00:00 | Production Enter | 61 | 61 | 1 | 8.000 | 01 | 8.000 | 8.000 | 29.000 |
| 06/23/17 | 00:00 | Production Enter | 64 | 64 | 1 | 1.000 | 01 | 1.000 | 9.000 | 30.000 |
| 06/26/17 | 00:00 | Production Enter | 65 | 65 | 1 | 1.000 | 01 | 1.000 | 10.000 | 31.000 |
| 06/27/17 | 00:00 | Production Enter | 66 | 66 | 1 | 1.000 | 02 | 1.000 | 22.000 | 32.000 |
| 06/27/17 | 00:00 | Production Enter | 67 | 67 | 1 | 1.000 | 02 | 1.000 | 23.000 | 33.000 |
| 06/27/17 | 00:00 | Production Enter | 68 | 68 | 1 | 1.000 | 01 | 1.000 | 11.000 | 34.000 |
| 06/27/17 | 00:00 | Sales Exit | 90 | 90 | 0 | 10.000 | 02 | -10.000 | 13.000 | 24.000 |
| 06/27/17 | 00:00 | Sales Exit | 91 | 91 | 0 | 10.000 | 02 | -10.000 | 3.000 | 14.000 |
| 06/27/17 | 00:00 | Sales Exit | 98 | 98 | 0 | 10.000 | 02 | -10.000 | -7.000 | 4.000 |

17.6. Material Account Diagram

To see the incoming and outgoing inventory transactions of an item on a diagram, open the Material

Account Diagram. Drag a non-operation item, drop it on the 'Material Account Diagram' line, and then click on the line. The 'Material Account Diagram' form will open.



17.7. Operations Sequence Diagram

To see the MTO sequence of a production order, drag it, place it on the 'Operations Sequence Diagram' line, and then click on the line. The [Operations Sequence Diagram](#) will open.

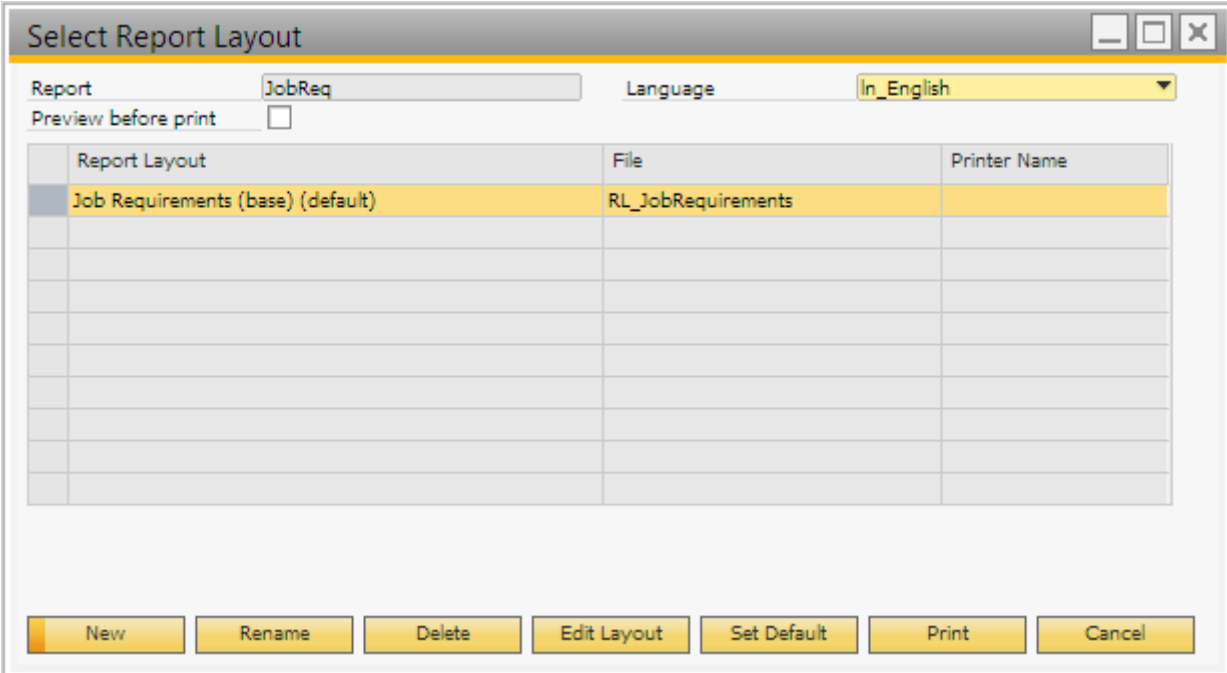
The operations sequence diagram can only be opened for release production orders that are part of an MTO chain.



17.8. Job Requirements Report

The Job Requirements report can be printed with the drag & relate function as well.

Drag a released production order, drop it on the 'Job Requirements Report' line, and then click on the line. The 'Select Report Layout' window will open up. After the report is selected, the system will print the Job Requirements Report for the production order.

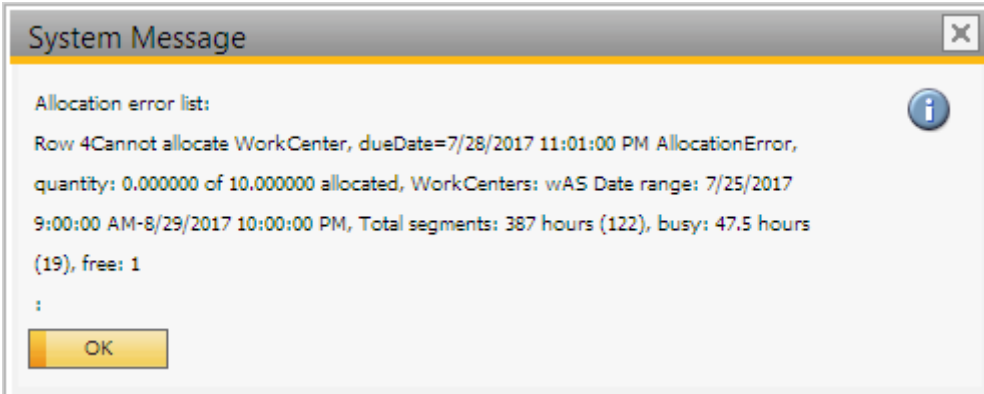


The 'Select Report Layout' dialog box features a title bar with standard window controls. Below the title bar, there are two input fields: 'Report' with the value 'JobReq' and 'Language' with a dropdown menu showing 'In_English'. A checkbox labeled 'Preview before print' is currently unchecked. The main area contains a table with three columns: 'Report Layout', 'File', and 'Printer Name'. The first row is highlighted in yellow and contains the text 'Job Requirements (base) (default)', 'RL_JobRequirements', and an empty field. Below this row are several empty rows. At the bottom of the dialog, there is a row of seven buttons: 'New', 'Rename', 'Delete', 'Edit Layout', 'Set Default', 'Print', and 'Cancel'.

| Report Layout | File | Printer Name |
|-----------------------------------|--------------------|--------------|
| Job Requirements (base) (default) | RL_JobRequirements | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

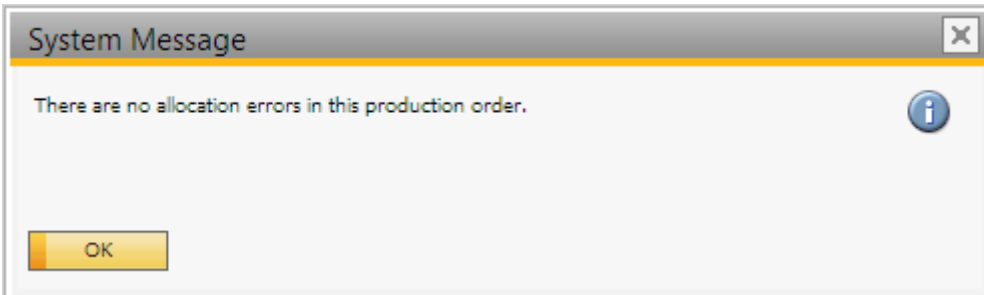
17.9. Allocation Status

To see the allocation status of a released production order, drag the production order, place it on the 'Allocation Status' line, and then click on the line. The [Allocation error list window](#) will open.



The 'System Message' dialog box has a title bar with a close button. The main text area displays an 'Allocation error list:' followed by a detailed error message: 'Row 4Cannot allocate WorkCenter, dueDate=7/28/2017 11:01:00 PM AllocationError, quantity: 0.000000 of 10.000000 allocated, WorkCenters: wAS Date range: 7/25/2017 9:00:00 AM-8/29/2017 10:00:00 PM, Total segments: 387 hours (122), busy: 47.5 hours (19), free: 1'. There is an information icon (i) on the right side of the text area. At the bottom left, there is an 'OK' button.

If there are no allocation errors, the following system message will open:



The 'System Message' dialog box has a title bar with a close button. The main text area displays the message: 'There are no allocation errors in this production order.' There is an information icon (i) on the right side of the text area. At the bottom left, there is an 'OK' button.

From:

<https://wiki.produmex.name/> - **Produmex**

Permanent link:

<https://wiki.produmex.name/doku.php?id=implementation:manufacturing:dragandrelate&rev=1505744766>

Last update: **2017/09/18 14:26**

