How to create a bill of materials (BOM) in SAP Business One

This guide shows you how to create a bill of materials (BOM) in SAP Business One for a production item. The example builds a production BOM for a company laptop. You define route stages, text notes, item components, resources, and a byproduct, then add the finished BOM to the system.

Prerequisites

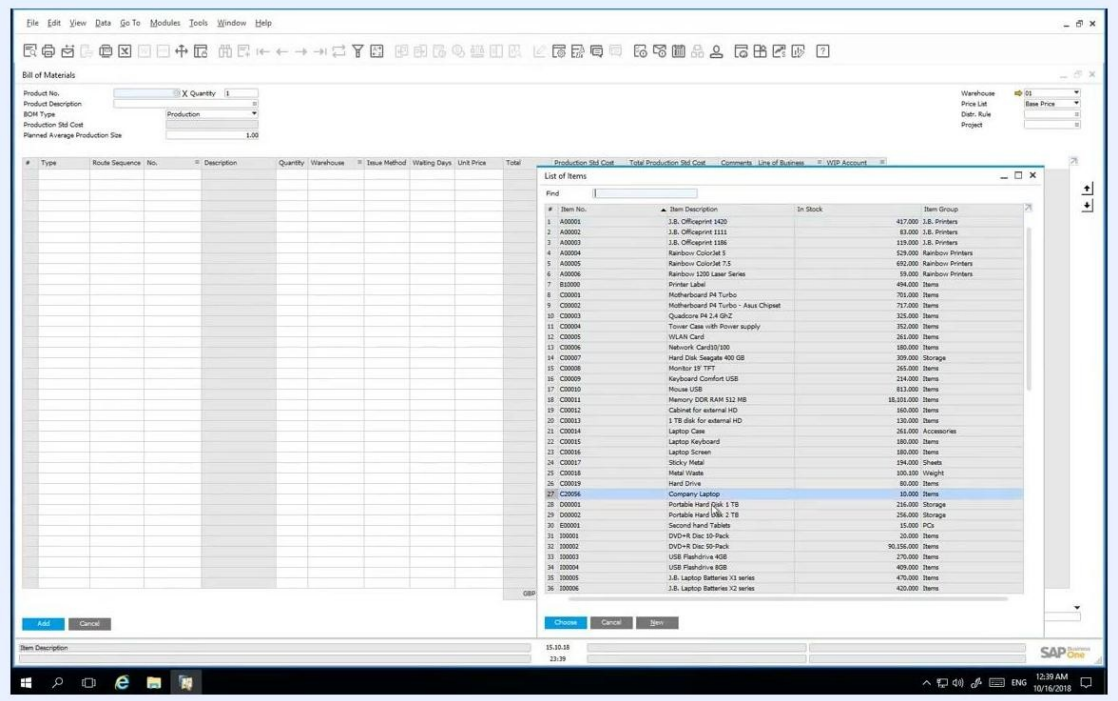
- Access to SAP Business One.
- A product number for the item you want to build. This example uses C0096, "Company Laptop".
- Items, resources, and route stages that you can select from the lists in the system. This example uses a motherboard, a laptop case, technicians, and machines.

Create the BOM structure

1. Open the Bill of Materials window

1. Open SAP Business One.
2. In the left navigation pane, click **Production**.

3. Select **Bill of Materials**.

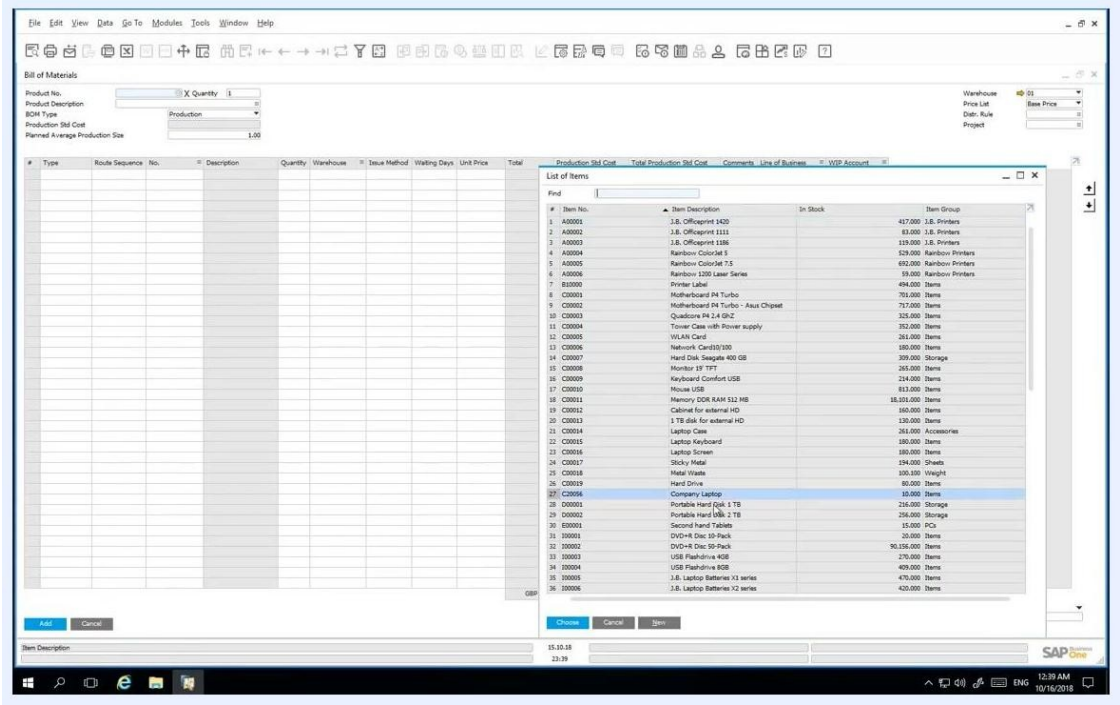


SAP Business One main dashboard with the Production > Bill of Materials menu highlighted

2. Select the product in Add Mode

1. Make sure the Bill of Materials window is in **Add Mode**.
2. In the **Product No.** field, select the product number for the company laptop, for example C0096.

3. Confirm that **BOM Type** is set to **Production**.

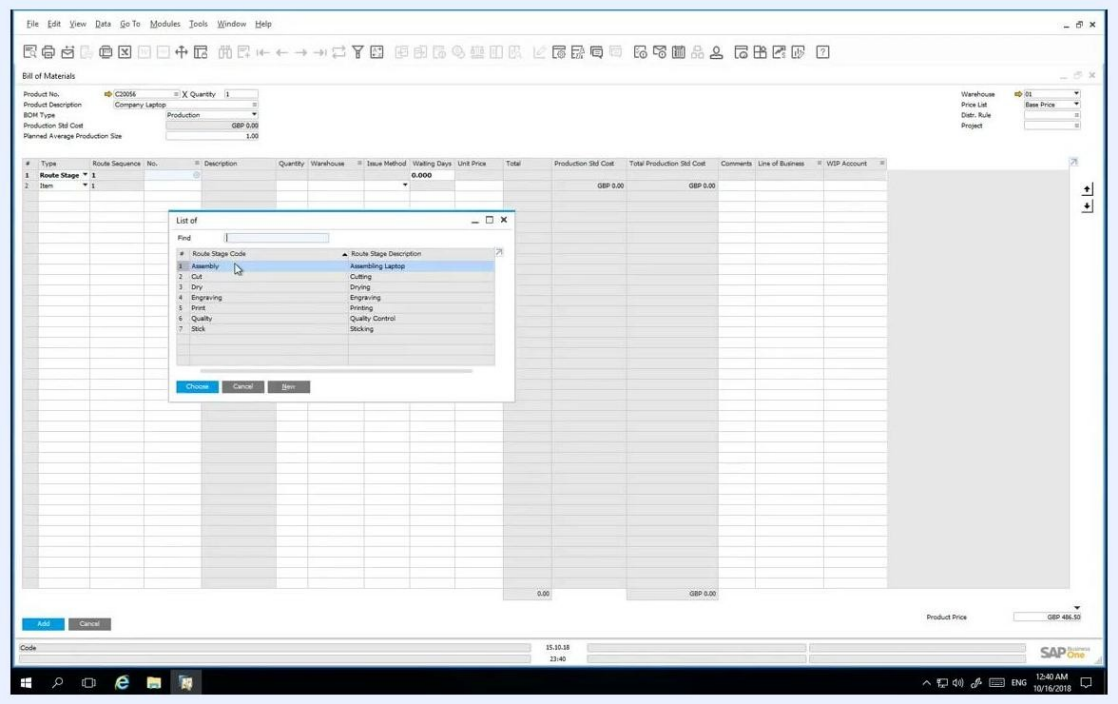


Bill of Materials window with Company Laptop selected and BOM Type set to Production

3. Add the first route stage

1. In the BOM line items section, set the **Type** of the first line to **Route Stage**.

2. From the list of route stages, select **Assembly**. The description shows "Assembling Laptop".

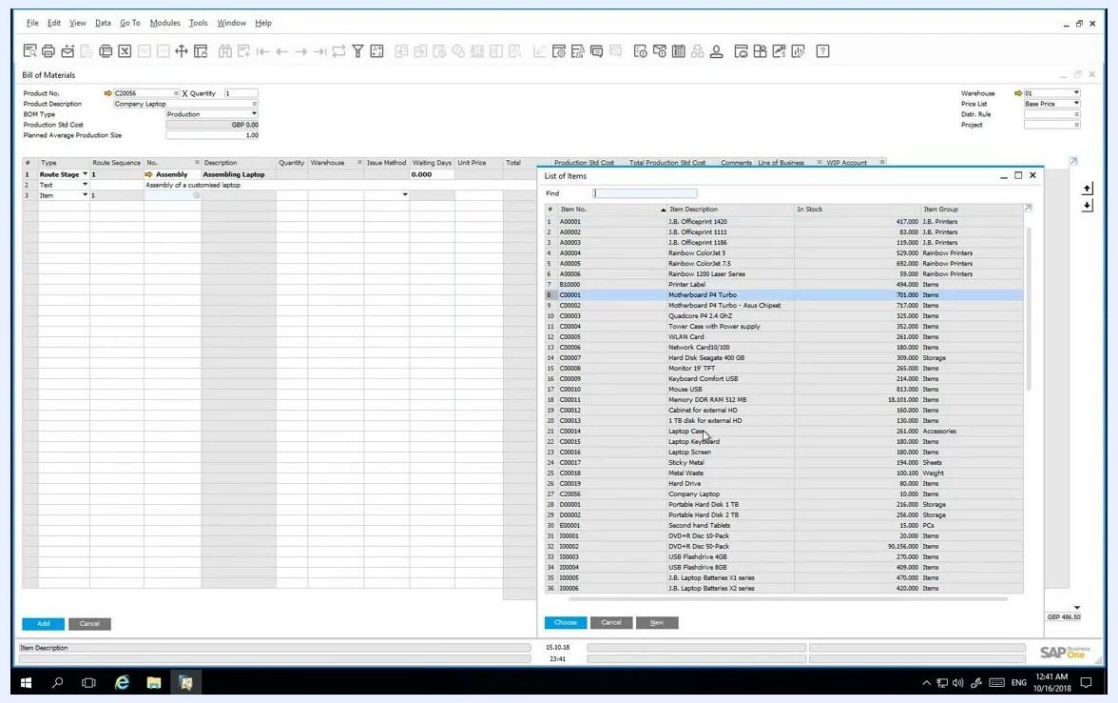


Bill of Materials window with Route Stage type selected and Assembly route stage highlighted

4. Add a text line

1. Add a new line and set the **Type** to **Text**.
2. In the text details window, enter a description such as Assembly of a customised laptop.

3. Click **OK** to save the text line.



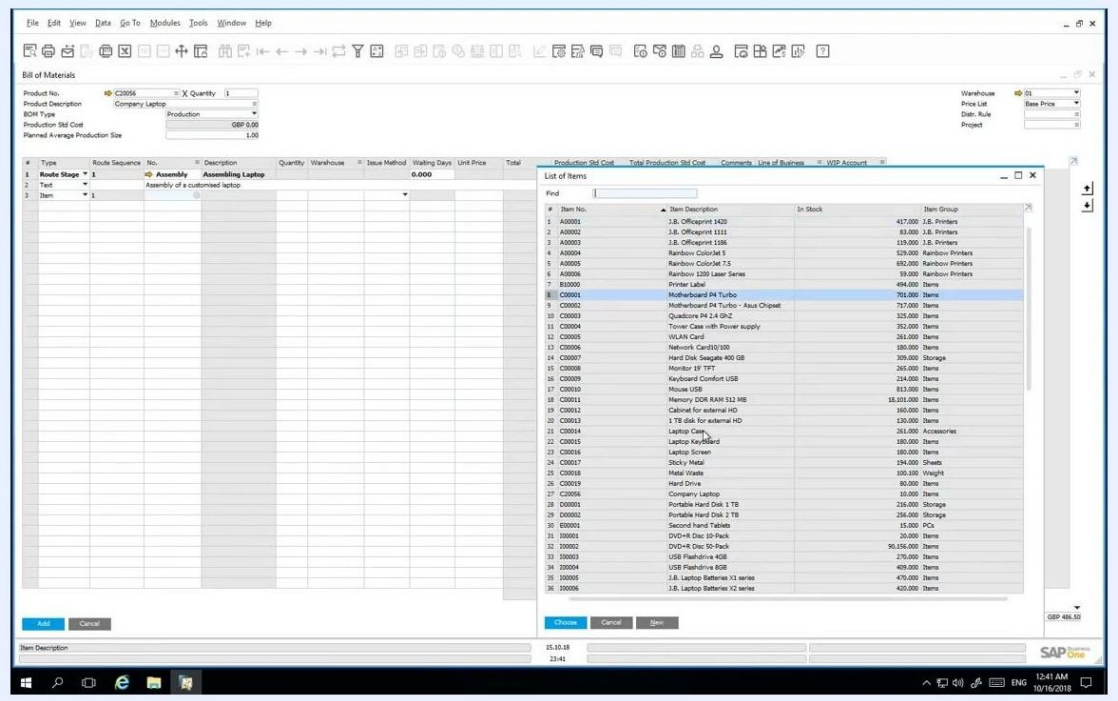
Row Text Details dialog with "Assembly of a customised laptop" entered

5. Add the required components

1. Add a new line and set the **Type** to **Item**.
2. Select each of the following items from the list of available items in the system:

    - Motherboard
    - Laptop Case
    - Laptop Keyboard
    - Laptop Screen

- Hard Drive

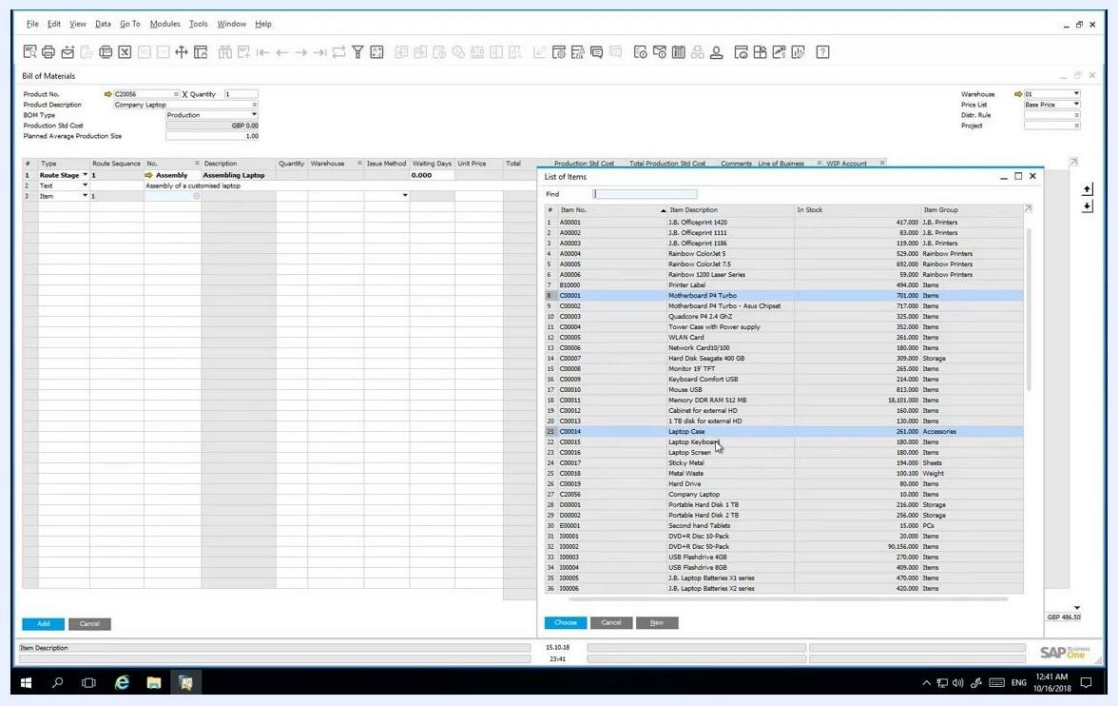


Bill of Materials window with item selection list showing Motherboard, Laptop Case, Laptop Keyboard, Laptop Screen, and Hard Drive

Add resources and route stages

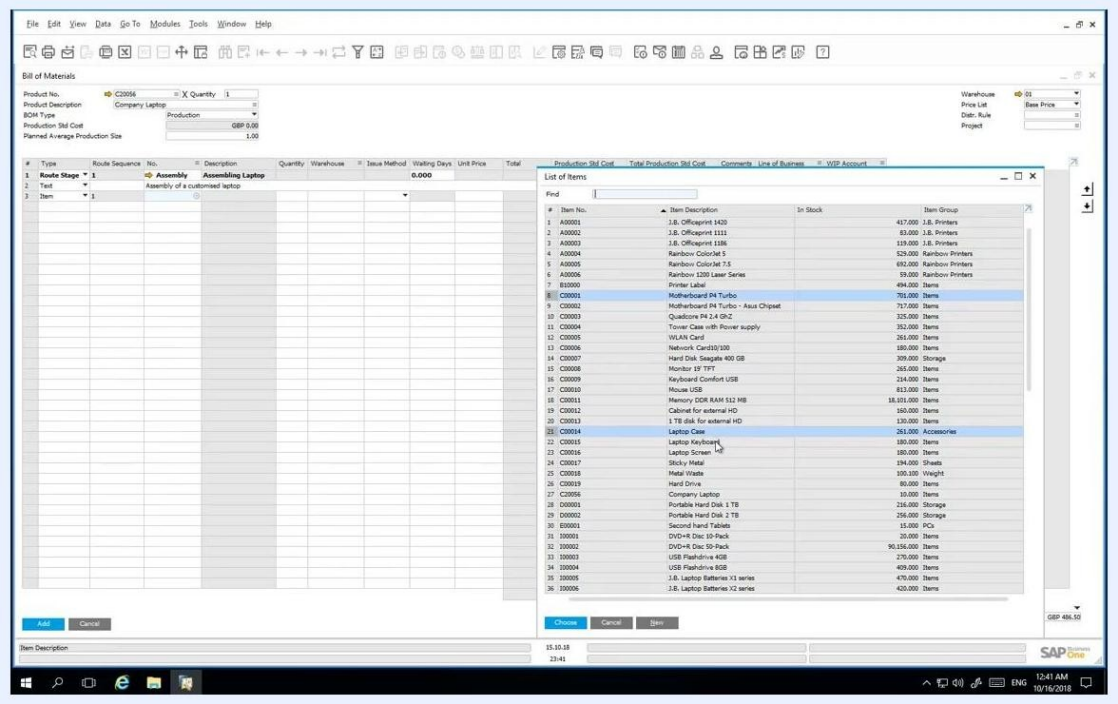
6. Add a resource to the assembly stage

1. On the next available line under the assembly route stage, open the dropdown in the **Type** column and select **Resource**.



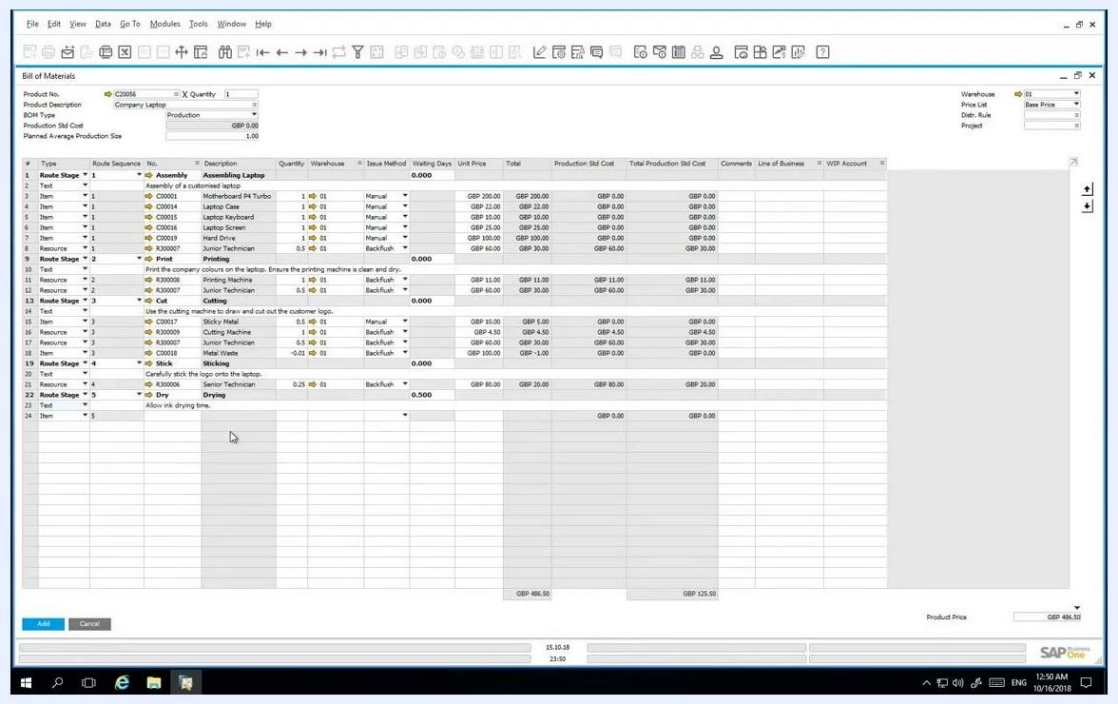
Bill of Materials window with the Type dropdown open, showing Resource selected for the next line

2. In the **List of Resources** dialog, select **Junior Technician** and click **Choose**.



List of Resources dialog open, Junior Technician highlighted for selection

3. In the **Quantity** field, enter 0.5. A quantity of 1 equals one hour, so 0.5 represents 30 minutes.



Bill of Materials window with Junior Technician resource added and quantity set to 0.5

7. Add the remaining route stages

Continue adding route stages, resources, and items as follows.

Printing stage

- Description: Print the company colours on the laptop. Ensure the printing machine is clean and dry.
- Resource: Printing Machine, quantity 0.1
- Resource: Junior Technician, quantity 0.5

Cutting stage

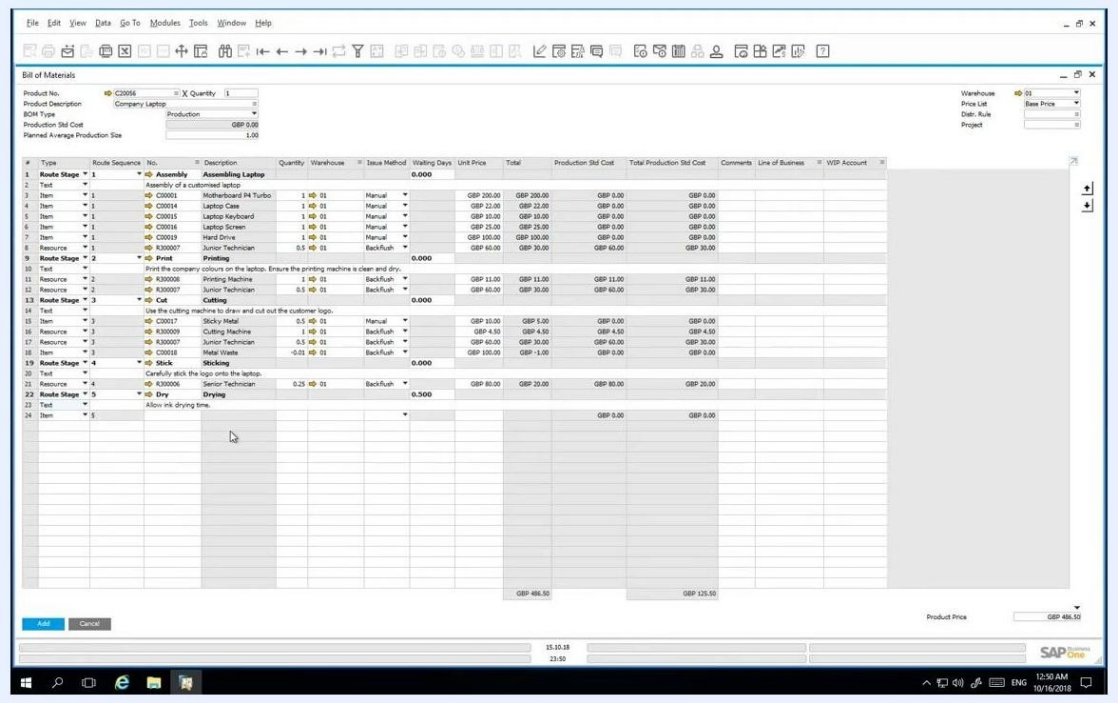
- Description: Use the cutting machine to draw and cut out the customer logo.
- Item: Sticky Metal, quantity 0.5
- Resource: Cutting Machine, quantity 0.5
- Resource: Junior Technician, quantity 0.5
- Byproduct: Metal Waste, quantity -0.01. The negative value returns the waste to inventory.

Sticking stage

- Description: Carefully stick the logo onto the laptop.
- Resource: Senior Technician, quantity 0.25

Drying stage

- Description: Allow ink drying time.
- Resource: Drying, quantity 0.5

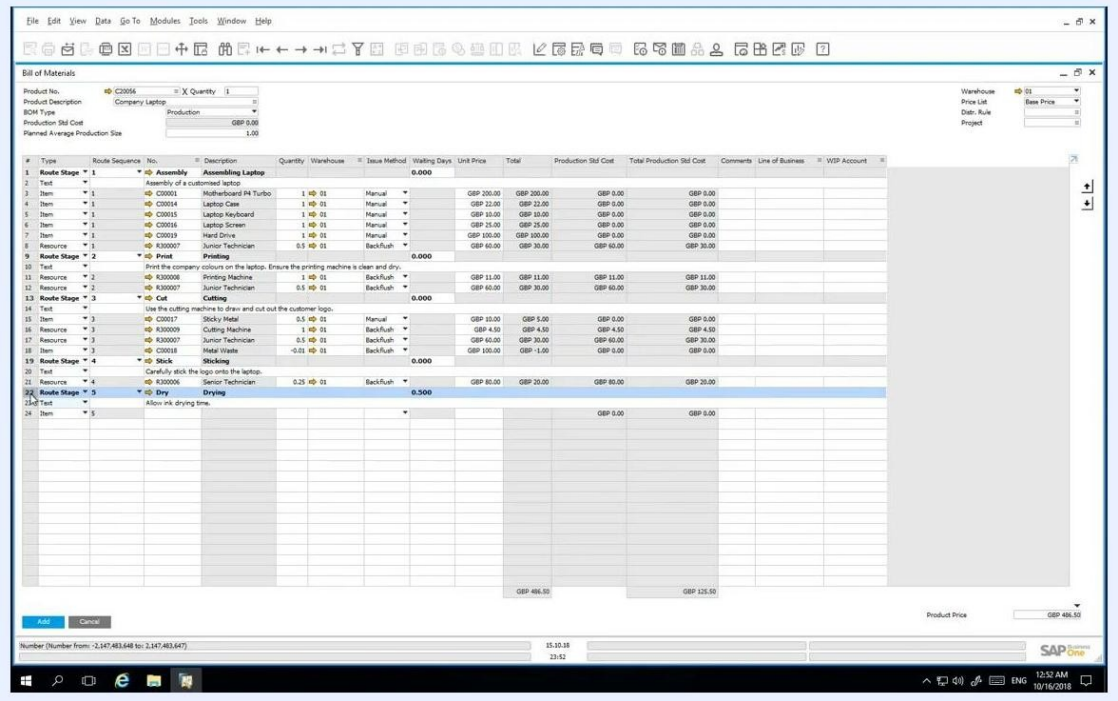


Bill of Materials window showing all five route stages, resources, and items fully defined for the company laptop BOM

8. Define the drying route stage

1. In the **Type** column, select **Route Stage** and enter **Drying** as the description.
2. Set **Waiting Days** to 0.500 to define the drying period.
3. Optionally, add a **Text** line under this stage with the note "Allow ink drying time."

4. Assign a resource if needed, for example the Drying resource.



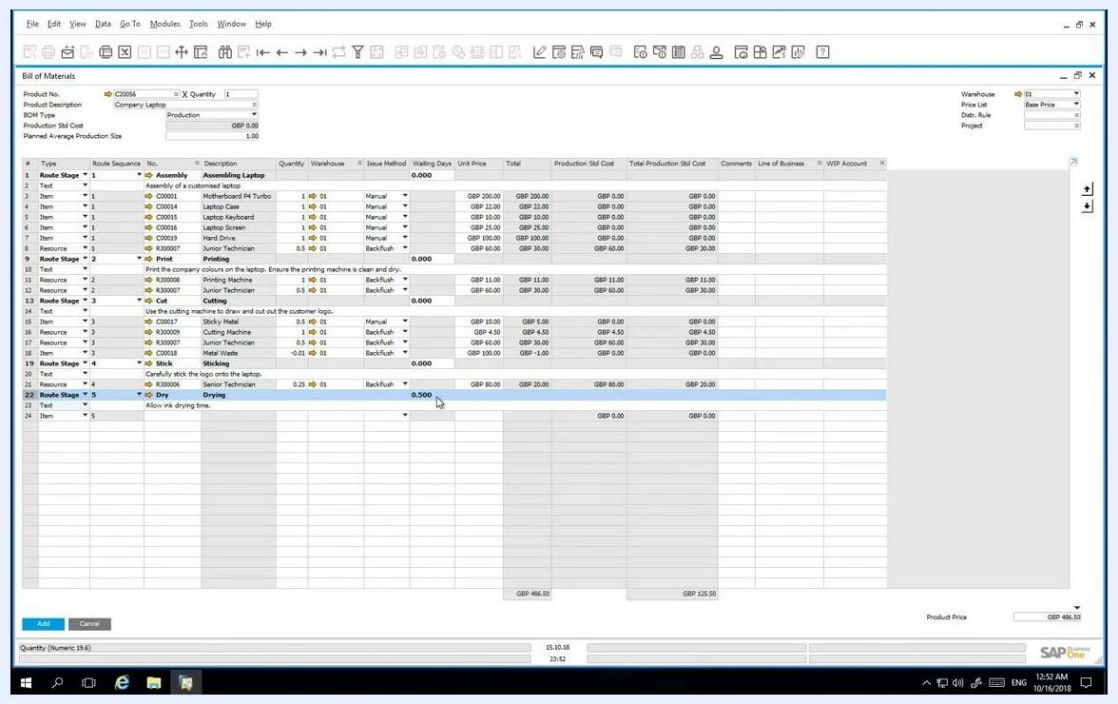
Bill of Materials window showing the Drying route stage with a waiting period defined and a text note for ink drying time

Manage the BOM

9. Rearrange BOM lines

- Use the indicator arrows on the left side of the BOM window to move a single line (resource, item, or text) up or down.
- To move several lines at once, hold **Ctrl**, select the rows, and use the indicator arrows to move them together.

- To move an entire route stage, change its **Routing Sequence** number. The BOM reorders the stages automatically.

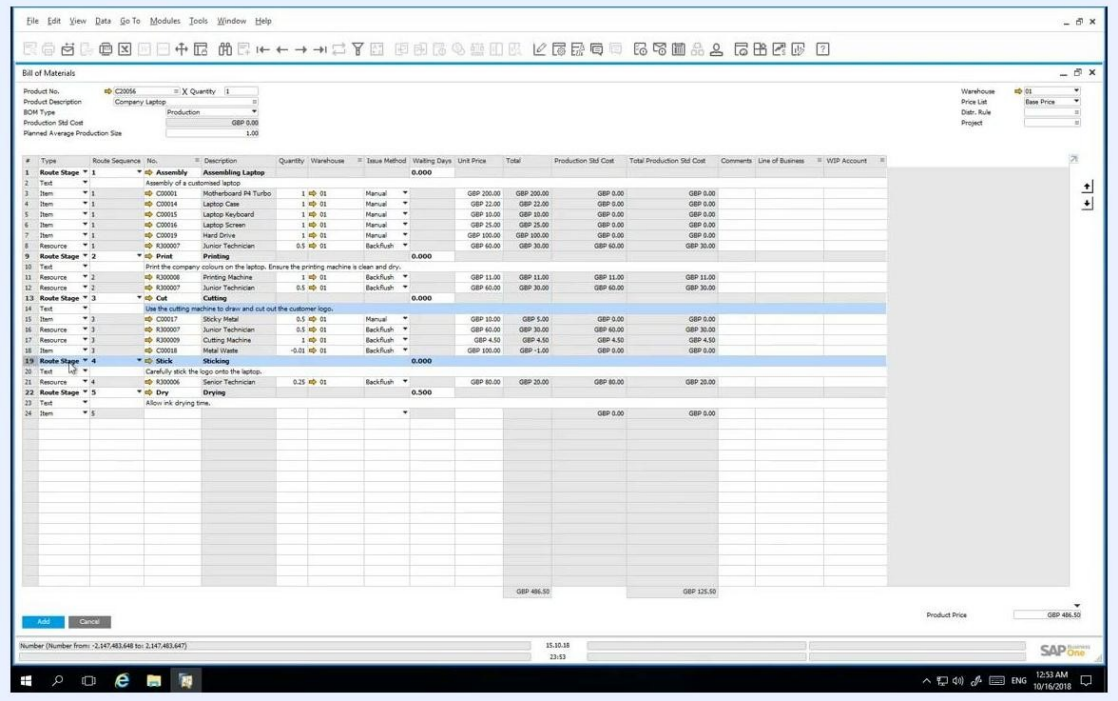


Bill of Materials window with cursor on indicator arrow, demonstrating how to move BOM lines

10. Adjust the product price

1. Review the **Product Price** field at the bottom right of the BOM window.
2. Note that the displayed price, for example GBP 486.50, is an indicative price for the final product.

3. If needed, update the value manually to the price you want.



Bill of Materials window with Product Price field highlighted at the bottom right

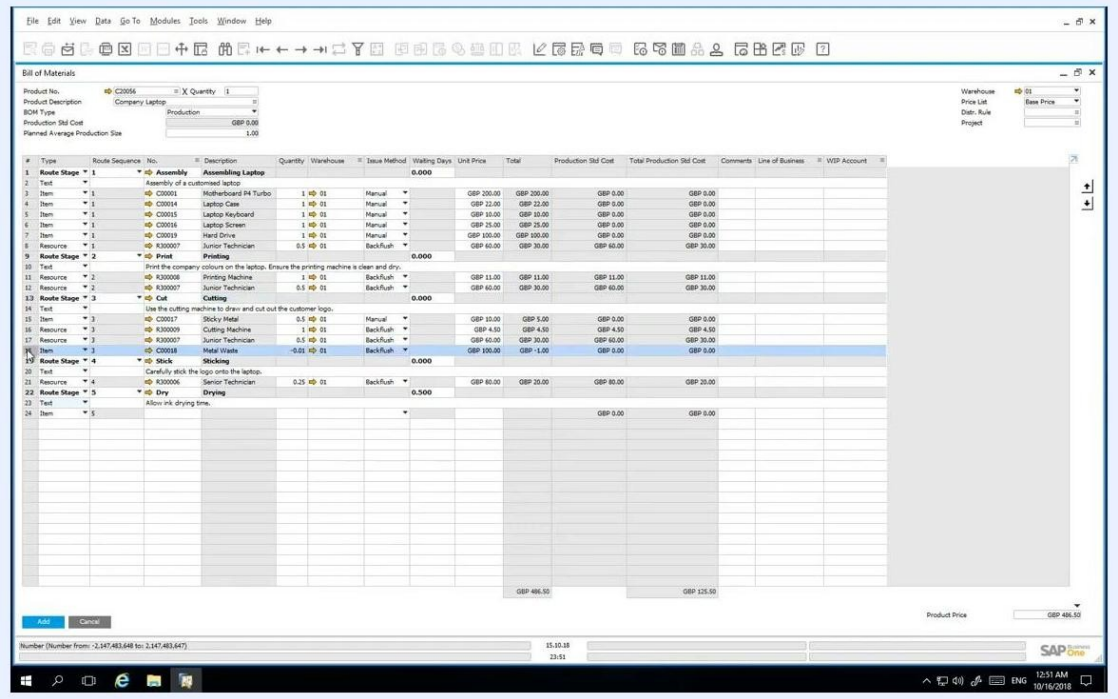
Review and add the BOM

11. Review all route stages

Check the following before you save:

- Each route stage has the correct resources, items, and quantities.
- Negative quantities, such as for Metal Waste, return byproducts to inventory.

- Every description accurately reflects the production process.

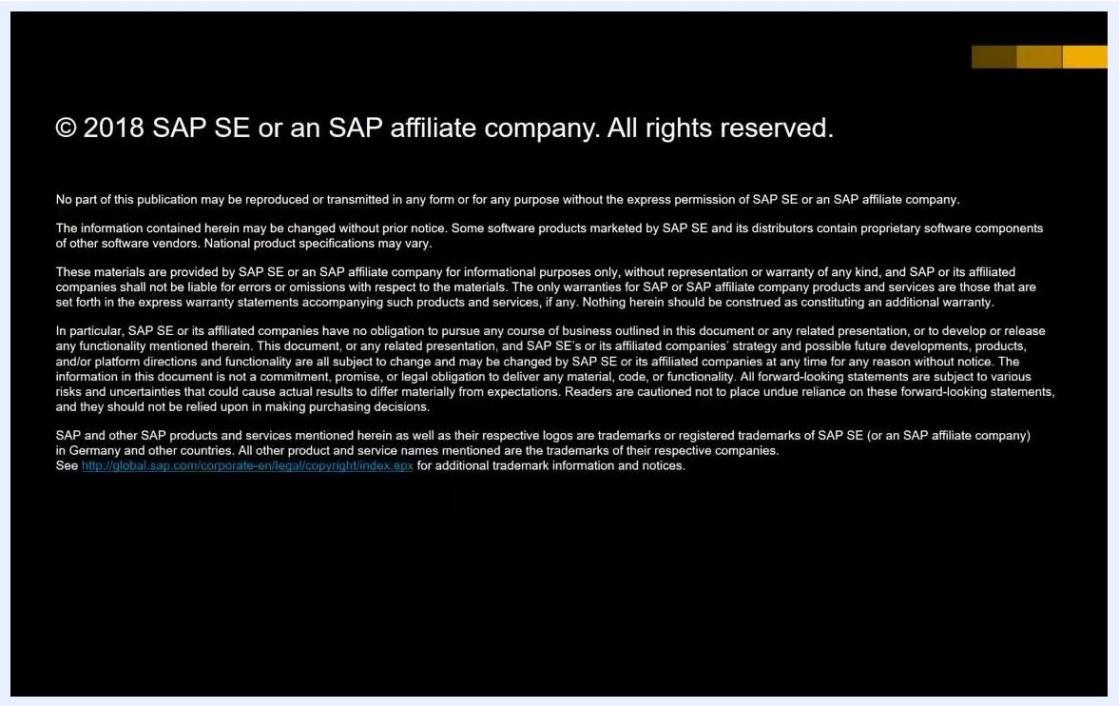


Bill of Materials window with all route stages, resources, and byproducts visible, including negative quantity for Metal Waste

12. Add the BOM to the system

1. Confirm that all route stages, resources, items, and byproducts are correctly defined and sequenced.
2. Confirm that all quantities, waiting periods, and descriptions are accurate.

3. Click **Add** at the bottom left of the BOM window to save the completed BOM.



Bill of Materials window ready for final review and addition to the system, with all stages and product price visible

Summary and what's next

You now know how to create a bill of materials (BOM) in SAP Business One. The company laptop BOM includes route stages, explanatory text, components, resources, a byproduct, and a product price. For your own production process, define additional route stages, resources, and components as needed.