

Tutorial: Start Materials Creation

11.3

August 2026

DOCUMENT ACCESS

Public

DISCLAIMER

The contents of this document are under copyright of Critical Manufacturing S.A. it is released on condition that it shall not be copied in whole, in part or otherwise reproduced (whether by photographic, or any other method) and the contents therefore shall not be divulged to any person other than that of the addressee (save to other authorized offices of his organization having need to know such contents, for the purpose for which disclosure is made) without prior written consent of submitting company.

Home Tutorials All Guides Electronics

Tutorial: Start Materials Creation

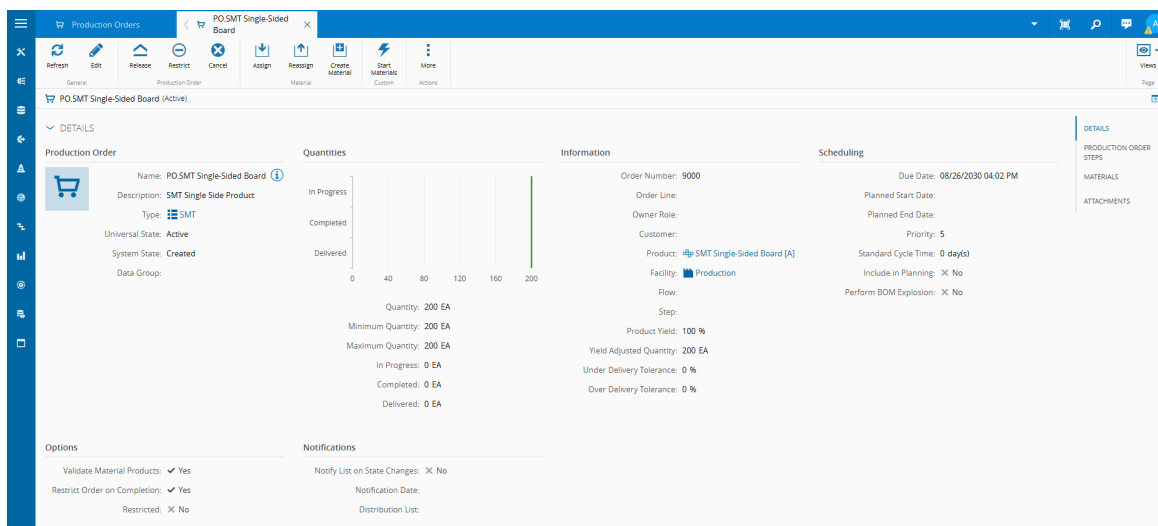
Estimated time to read: 2 minutes

Objective

Learn how to start materials for a Production Order, ensuring they are correctly created or assigned and aligned with production requirements.

Step 1: Select the Production Order

- Navigate to **Production Orders**
- Open the Production Order where you want to start materials

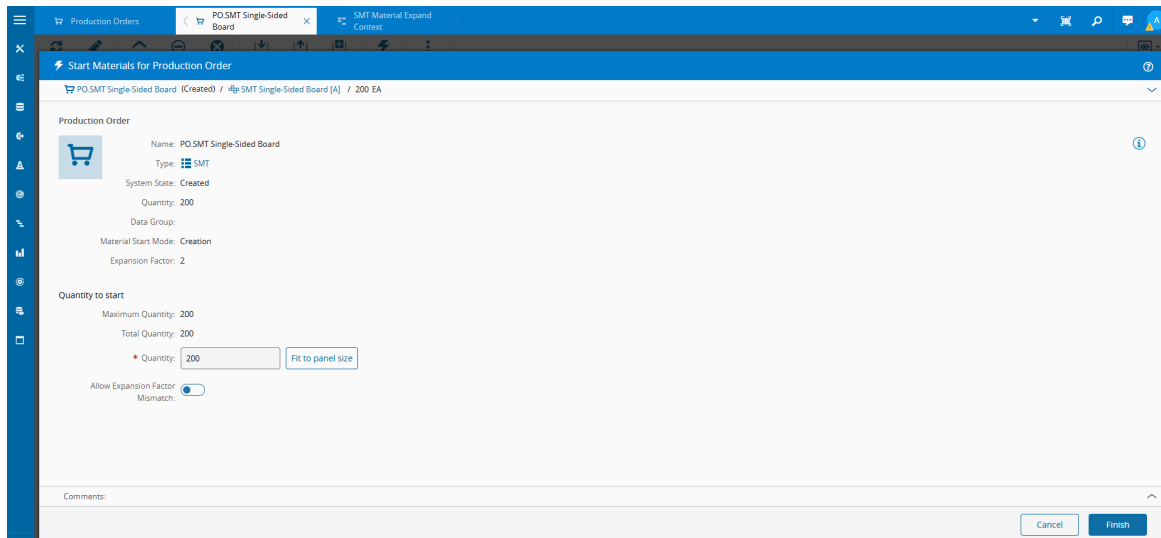


The screenshot displays the SAP Production Order 'PO SMT Single-Sided Board' (Active). The interface is divided into several sections:

- Production Order Details:** Name: PO SMT Single-Sided Board, Description: SMT Single Side Product, Type: SMT, Universal State: Active, System State: Created, Data Group: .
- Quantities:** A bar chart showing the status of the order. The Y-axis represents quantities from 0 to 200. The X-axis shows 'In Progress', 'Completed', and 'Delivered'. The 'In Progress' bar is at 200 EA. Below the chart, it lists: Quantity: 200 EA, Minimum Quantity: 200 EA, Maximum Quantity: 200 EA, In Progress: 0 EA, Completed: 0 EA, Delivered: 0 EA.
- Information:** Order Number: 9000, Order Line: , Owner Role: , Customer: , Product: # SMT Single-Sided Board [A], Facility: Production, Flow: , Step: , Product Yield: 100 %, Yield Adjusted Quantity: 200 EA, Under Delivery Tolerance: 0 %, Over Delivery Tolerance: 0 %.
- Scheduling:** Due Date: 08/26/2030 04:02 PM, Planned Start Date: , Planned End Date: , Priority: 5, Standard Cycle Time: 0 days(s), Include in Planning: X No, Perform BOM Explosion: X No.
- Options:** Validate Material Products: X Yes, Restrict Order on Completion: X Yes, Restricted: X No.
- Notifications:** Notify List on State Changes: X No, Notification Date: , Distribution List: .

Step 2: Start Materials

- Click the **Start Materials** action
- The material start wizard will open



Production Order

Name: PO.SMT Single-Sided Board
Type: SMT
System State: Created
Quantity: 200
Data Group:
Material Start Mode: Creation
Expansion Factor: 2

Quantity to start

Maximum Quantity: 200
Total Quantity: 200
Quantity: 200 [Fit to panel size](#)
Allow Expansion Factor Mismatch: ☒

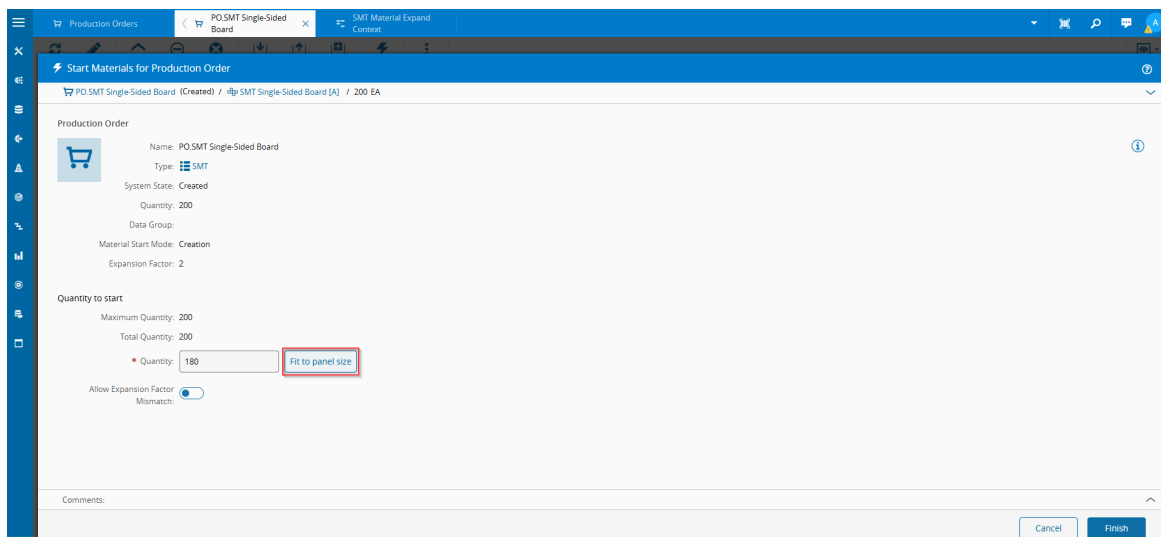
Comments:

[Cancel](#) [Finish](#)

Step 3: Define Material Quantity

- Enter the quantity to be created or assigned
- Adjust quantity based on production constraints:
 - Use **Fit to panel size**
 - Automatically adjusts quantity to match valid multiples based on the expansion factor
 - Use **Allow mismatch with expansion factor**
 - Enabled: allows any quantity
 - Disabled: only valid multiples of the expansion factor are allowed

Available from SMT Template version 3.4.0 onwards



Production Order

Name: PO.SMT Single-Sided Board
Type: SMT
System State: Created
Quantity: 200
Data Group:
Material Start Mode: Creation
Expansion Factor: 2

Quantity to start

Maximum Quantity: 200
Total Quantity: 200
Quantity: 180 [Fit to panel size](#)
Allow Expansion Factor Mismatch: ☒

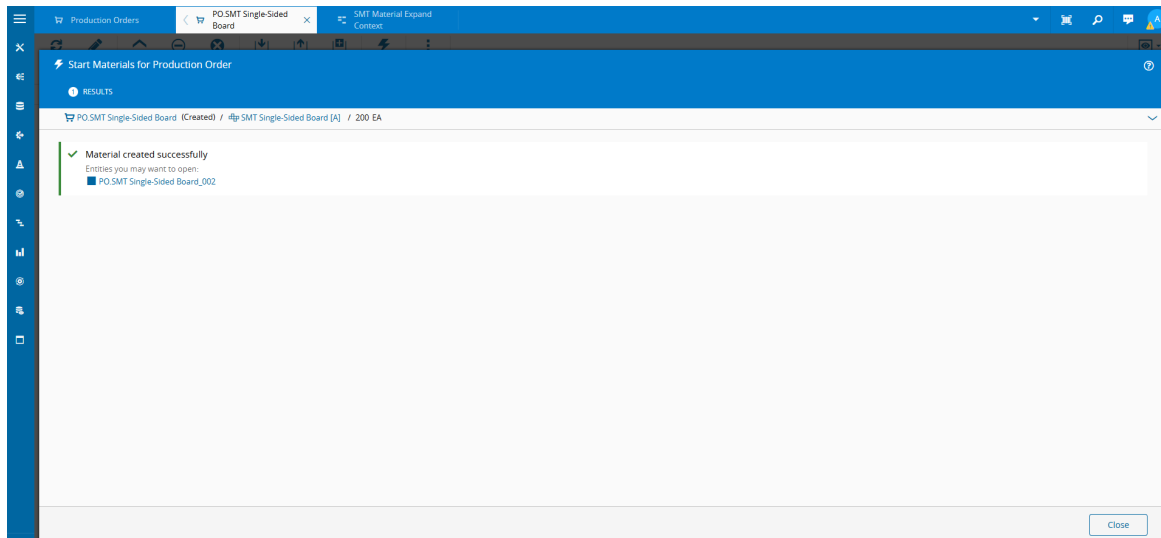
Comments:

[Cancel](#) [Finish](#)

Step 4: Confirm Material Creation / Assignment

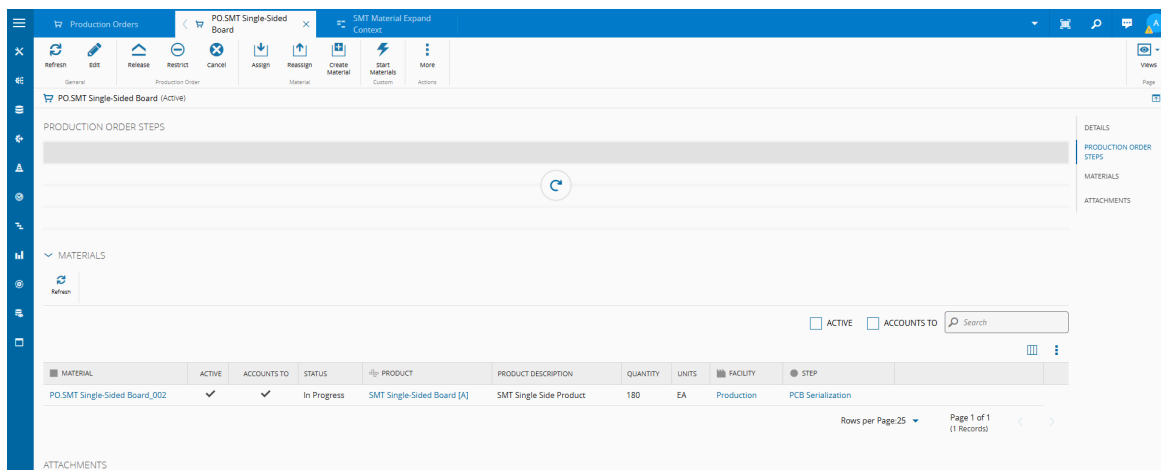
- Review the information in the wizard

- Click **Finish**
- A confirmation message is displayed indicating success



Step 5: Validate Result

- Return to the Production Order
- Confirm that:
- The material is now listed under the Production Order
- The material state is **Active**



Expected Result

- Materials are successfully created or assigned to the Production Order
- Materials are set to **Active**
- The Production Order **Completed Quantity** remains unchanged

Frequent Configuration Questions

Why can't I start materials for a Production Order?

Verify that the user has the required permission:

- `SMT.StartMaterialsForProductionOrder`

Why is the generated quantity incorrect?

Review the configuration of:

- The expansion factor settings.
- The expansion factor toggle and its intended behavior.

Why is the "Fit to Panel Size" option not working?

Ensure that the form configured in `/SMT/StartMaterialsForProductionOrder/Form/` matches the form configured in the `SMTMaterialExpandContext` Smart Table.

Why are materials not being created?

Validate the product configuration and confirm that the `MaterialStartMode` attribute is correctly defined.



Legal Information

Disclaimer

The information contained in this document represents the current view of Critical Manufacturing on the issues discussed as of the date of publication. Because Critical Manufacturing must respond to changing market conditions, it should not be interpreted to be a commitment on the part of Critical Manufacturing, and Critical Manufacturing cannot guarantee the accuracy of any information presented after the date of publication. This document is for informational purposes only.

Critical Manufacturing makes no warranties, express, implied or statutory, as to the information herein contained.

Confidentiality Notice

All materials and information included herein are being provided by Critical Manufacturing to its Customer solely for Customer internal use for its business purposes. Critical Manufacturing retains all rights, titles, interests in and copyrights to the materials and information herein. The materials and information contained herein constitute confidential information of Critical Manufacturing and the Customer must not disclose or transfer by any means any of these materials or information, whether total or partial, to any third party without the prior explicit consent by Critical Manufacturing.

Copyright Information

All title and copyrights in and to the Software (including but not limited to any source code, binaries, designs, specifications, models, documents, layouts, images, photographs, animations, video, audio, music, text incorporated into the Software), the accompanying printed materials, and any copies of the Software, and any trademarks or service marks of Critical Manufacturing are owned by Critical Manufacturing unless explicitly stated otherwise. All title and intellectual property rights in and to the content that may be accessed through use of the Software is the property of the respective content owner and is protected by applicable copyright or other intellectual property laws and treaties.

Trademark Information

Critical Manufacturing is a registered trademark of Critical Manufacturing.

All other trademarks are property of their respective owners.