



## Feature list K3|pebblestone manufacturing

  
**K3|pebblestone Cloud (Gen. 2) –  January 2021**  
based on Microsoft Dynamics 365 Business Central 2020 Wave 2 (v17.0)

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# 1. Production BOM (bill of material) with matrix

## 1.1 Production BOM

A production bill of material (BOM) holds master data that describes the components (materials) used in the production of a parent item. Items within fashion usually have colours and sizes and therefore K3|pebblestone manufacturing has added a matrix to the production BOM within Microsoft Dynamics 365 Business Central, to present selected values as an overview in rows and columns.

The added inherit and growth functionality makes the production BOM creation easy and straightforward. If the parent item is red the fabric and yarn most likely should also be red, so the red colour of the fabric and yarn can be inherited from the parent item to always use the same colour if possible. The inherit functionality is also available on the size level if the size of the parent item is medium, the size label most likely should also be medium. The growth functionality makes it easy to automatically calculate the consumption of the materials. If the size is getting bigger more fabric is needed, the growth functionality makes this possible through a growth % or fixed value.

Once a production order is created for that parent item, its production BOM will govern the calculation of material requirements as represented on the production order components page.

Example of components (materials) for a production BOM for a polo T-shirt:

The screenshot shows the 'Production BOM' interface for item 'P00010 · Polo Pique uni'. The 'General' section includes fields for No., Item No., Description, Unit of Measure Code, Size Range Code, Default Size Code, and 2nd Size Range Code. The 'Lines' table below lists components with their quantities, units, and inheritance/growth settings.

Type	No.	Description	Quantity per	Unit of Measure Code	Inherit Color	Inherit Size	Inherit 2nd Size	Growth per	Growth %	Growth Value	Rounding Method Code	Production BOM Default Size Code	Production BOM Default 2nd Size Code
Item	M-10009	Fabric Pique	8	M	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Size Code	10.00	1.00	HUNDREDTHS	M	
Item	M-10001	Button 13mm	3	PCS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Size Code	0.00	1.00	HALF	M	
Item	M-10000	Yarn	12	M	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Size Code	20.00	0.00	NEARWHOLE	M	
Item	M-10010	Brand Label	1	PCS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		0.00	0.00		M	
Item	M-10011	Size Label Unisex	1	PCS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		0.00	0.00		M	

## 1.2 Production BOM Version

In K3|pebblestone gen. 1 the production BOM versions have been used to save the production BOMs that are applicable for several colour-and-size combinations. In K3|pebblestone gen. 2 the colour and sizes have been added separately as sub-tables to the Production BOM. This enables the standard use of Production BOM versions within Business Central. And it is also possible to open the matrix from each production BOM version.

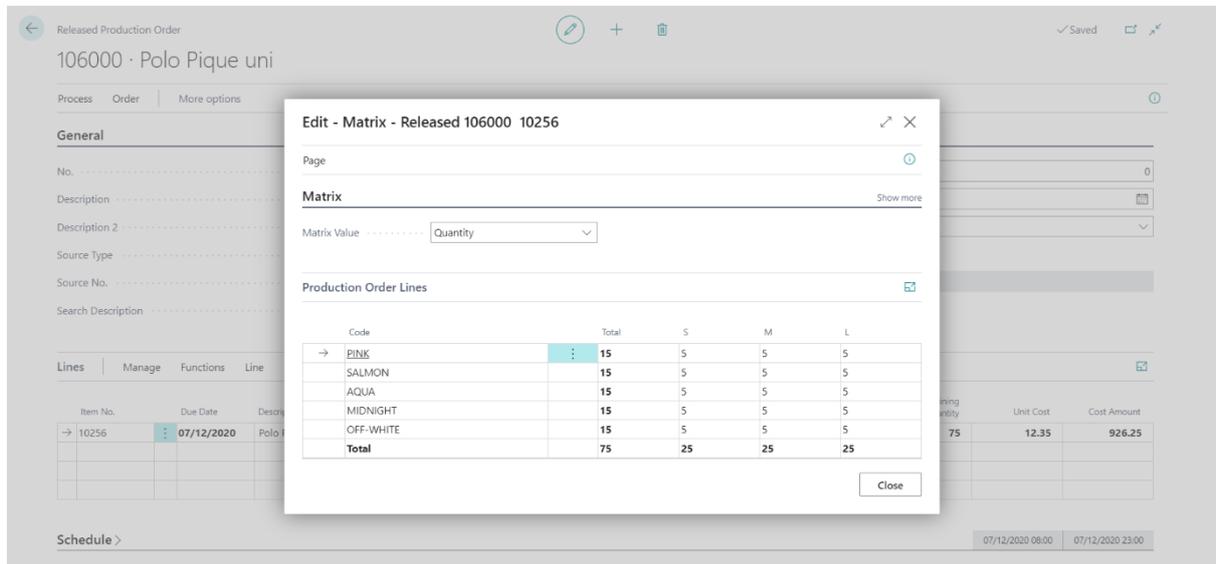
## 1.3 Copy production BOM

In the copy production BOM functionality, the colour, size, and 2<sup>nd</sup> size have been added. If you copy a production BOM this fashion-specific information is also copied.

## 2. Production order with matrix

### 2.1 Production order

Production orders are used to manage the conversion of purchased materials into manufactured items. The manufactured items within fashion have colours and sizes and therefore K3|pebblestone Manufacturing added the matrix to the production order within Business Central.



### 2.2 Manually create a production order

In this version, it is possible to create a production order on an order-by-order basis manually from the production order page.

Within Business Central it is also possible to generate production orders from the sales order planning or order planning pages. Multiple orders can be created from the planning worksheet page. These features are not supported in this version of K3|pebblestone Manufacturing. These features will follow in future releases.

### 2.3 Information on production orders

Production orders are created using information from:

- Items with matrix and sublines
- Production BOMs
- Routings
- Machine centers
- Working centers

## 3. Routings

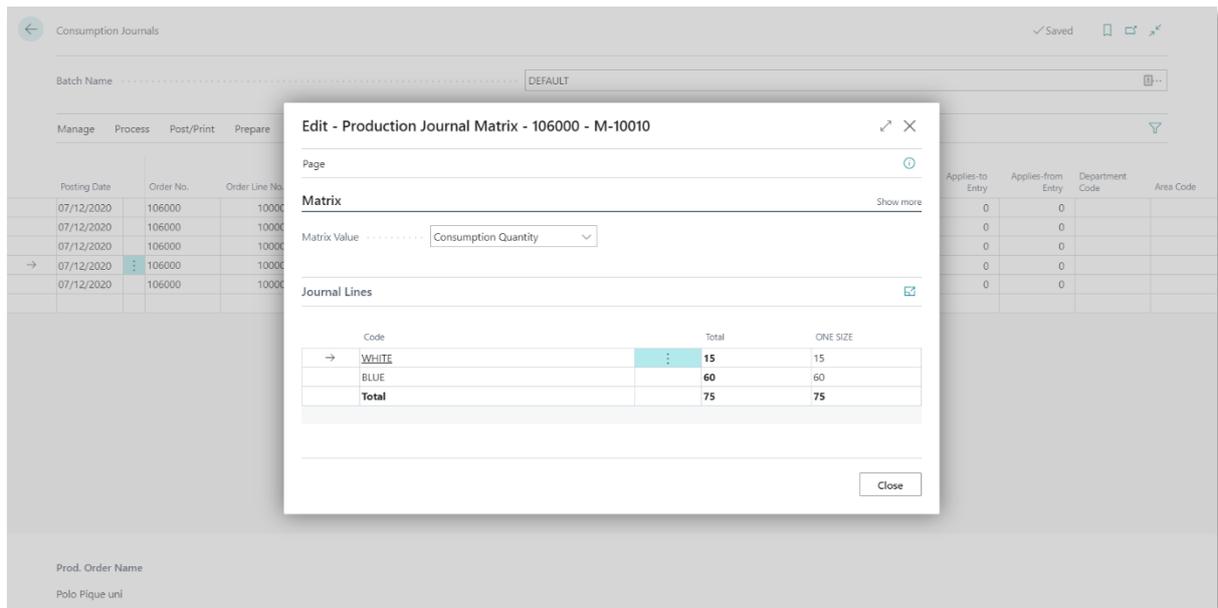
Manufacturing companies use routings to visualise and direct the manufacturing process. The routing is the basis of process scheduling, capacity scheduling, scheduled assignment of material needs, and manufacturing documents.

Within K3|pebblestone Manufacturing we made it possible to set up production order routing per. This means that routings can be applied to the production order, once per item, but also colour, size, 2<sup>nd</sup> size, or as item variant which is the combination of this.

## 4. Material consumption with matrix

The application offers a variety of options for how a manufacturing company might want to record material consumption. For example, material consumption may be recorded manually, which might be desirable if there are frequent component substitutions or greater than expected scrap.

Consumption of materials may be processed through the consumption and production journal to which K3|pebblestone Manufacturing has added the matrix within Business Central.



The registered consumption quantity is distributed automatically based on the expected quantity and can be viewed through the sublines.

## 5. Output and production journal with matrix

The application provides you with the capability to track how much time is spent working on a production order, in addition to recording the quantity produced. This information can help you more accurately determine the costs of production. Also, manufacturers using a standard costing system may want to record actual information to help them develop better standards.

The matrix and sub-lines lines of the components (materials) have been added to the output and production journal by K3|pebblestone manufacturing.