

# Batches and Serial Number Tracing

Description of batches and serial number tracing

**Boyum Solutions IT A/S** 

**Beas Tutorial** 

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#### 1. INTRODUCTION

The "Batches and Serial Number Tracing" function in Beas enables the user to trace batch and serial number managed items throughout the whole production life cycle. The function also makes it possible to track all transactions related to a batch or serial number.

Using the "Batches and Serial Number Tracing" function, you can track the following:

- Which batch or serial number item was created using a specific batch or serial number item. For example:
  - Which raw material item was used to create a specific semi-finished product, and which finished product includes this semi-finished item:

Finished Product (SN0012367) > Semi-finished Product 1 (SN0012345) > Raw Material Item A (BN00123497) > Semi-finished Product 2 (SN00123497) > Raw Material Item B (BN00123498) > Raw Material Item C (BN00123499)

- Whether a specific batch number was transformed into another batch number. This may happen during the following transactions:
  - Batch transfer
  - o Split batch
- Whether a batch or serial number was checked against a QC-order.
- Whether a production time receipt was reported for an operation linked to a batch or serial number.
- Any resource(s) related to an operation which is linked to a batch or serial number.
- The delivery note that was created for the delivery of a finished batch or serial number item (if any).

You can track and display the following transactions linked to a batch or serial number:

- Production goods receipt
- Issue for production
- Batch transfer
- Split batch

1.1. Examp	le							
1225	WH000175	04.02.19	C50003	ADA Technologies	04.02.19	04.02.19	FG0056	€ 0
	FG0056	Finished good - t	able		04.02.19	04.02.19	5.00	5.00
turnal turna						04.02.19		
	RM001	Table leg					20	20
	e 1597					04.02.19		20
	Document 4224: issue F 3N001241 Status free	Pos. 10 (2/4/2019)					1,500.00	1,500.00
E. (a) 20	RM002	Table top					5	5
	e 1597					04.02.19		5
	Document 4224: issue F	os. 10 (2/4/2019)					1,500.00	1,500.00
÷	SN00124620							
	SN00124821							
· · · · · · · · · · · · · · · · · · ·	SN00124622							
· · · · · · · · · · · · · · · · · · ·	SN00124823							
⊕ <b>∰</b> ∎L	Assembly Machine	Assembling table			04.02.19	04.02.19	150.000	150.000 Min.

In this example, we are creating tables (FG0056), using table legs (RM001) and table tops (RM002):

- **RMoo1** is a batch item, with the batch number **BNoo1241**.
- **RMoo2** is a serial number managed item, with the following serial numbers:
  - SN00124620
  - o **SN00124621**
  - o **SN00124622**
  - o SN00124623
  - SN00124624

These items were used as raw material in the finished product **FG0056**, **BN0016571** (in Work Order **1225**).

In this example, there are two transactions related to **BN001241**: a goods receipt and an issue for production. Also, there is a time receipt operation related to a resource (Assembly Machine) which is linked to the item:

1225	WH000175	04.02.19	C50003	ADA Technologies	04.02.19	04.02.19	FG0056	P @0
💼 10	FG0056	Finished good - tal	ble		04.02.19	04.02.19	5.00	5.00
	urnal entries							
	eipt 2251					04.02.19		
	BN0016571 Status free							
	0 RM001	Table leg					20	20
	issue 1597					04.02.19		20
	Document 4224: is:	sue Pos. 10 (2/4/2019)					1,500.00	1,500.00
i i	BN001241 Status fre	99						
	Goods receipt 70	9 V4894 Lumarx from 04.	02.19/10					40.00
		04.02.19 Work Order 122	8/10/10					-20.00
	-	Table top					5	5
	issue 1597					04.02.19		5
- T 🖬	Document 4224: iss	sue Pos. 10 (2/4/2019)					1,500.00	1,500.00
<b>+</b>	SN00124620							
+	SN00124621							
	SN00124622							
	SN00124623							
÷								
÷	SN00124624							
I I T E		Assembling table			04.02.19	04.02.19	150.000	150.000 Mir

To see what information is displayed about these items when you use the "Batches and Serial Number Tracing" function in Beas, see <u>Section 2 PROCESS</u>.

#### 2. PROCESS

To trace a batch or serial number in the system, follow these steps:

1. Go to Inventory > Item Management > Item Serial Number and select Serial Number tracing:

<u>File Edit View D</u> ata <u>G</u> o To <u>M</u> odules <u>T</u> ools	<u>W</u> indow <u>H</u> elp					_ 5
R 🖶 🖂 🕞 💼 🗎 🏠 🕞	前目体+	♦ ♦1 🛱 🖗 👰	4 B 5 4 4 7 3	L 📑 😫 🗖	📰 🙀 🖬 🛔 条	
Main Menu				(Look yr m	eter deta and documents	Search
			01.19			SAP

Under Item Management, you can also select Batches > Batch tracing.

The **Batches and Serial Number tracing** window opens.

2. Enter an item code in the **Item** field. You can enter an item code by typing the item code manually in the **Item** field, or you can select an item from the drop-down list.

Batches and Serial N	lumber tracing				_ 🗆 ×
Item 📫	FG0056	Finished good - table		Delivery Note	Yes
	Item	Description	^	Range	All
	FG0056	Finished good - table			
Contains Used	FGMTO1	Electronic Pump XR400			
Number	FP002	Finished product: table	w Warehous Name	Order Pos 1 Pos 2	QC order Time Rece Resc
	inventory-ser-test	inventory-ser-test			
	KG_Doener	Döner			
	mtc_level1	machine street			
	mtc_level2_1	machine 1			
	mtc_level2_1m1	material 1			
	mtc_level2_2	material machine 2			
	mtc_level2_2a1a	material 1 sub machine2	<b>v</b>		
<	> <				>
ОК	Cancel Detail				4

You can also search for an item in the system by clicking the <a>[</a> icon next to the **Item** field.

In this example, we selected item **FG0056**, which is described in <u>Section 1.1 Example</u>.

3. Once an item is selected, select a serial number or a batch number in the **Batch number** field. You can enter a batch or serial number manually, or you can select a number from the drop-down list.



You can also search for a batch or serial number in the system by clicking the 🦲 icon.

The default name of this field is **Batch number**. However, if a serial number is entered in the field, the name of the field will be displayed as **Serial number**.

The selected item is now displayed on the **Contains** tab with an overview of all the batch and serial number items that are linked to this item in the system.

	mber trac													_ □
	G0056				Finished goo						Delivery N	ote	Yes	
atch number 🛛 📫 🛛 🗠	N0016571			•	Status	released	Inv	/entory	5.000		Range		All	
Contains Used i	ſ	Documents	Delivery	Note										
Number		Document 1		umber	Date	Personne	Name Quant	ty Warehous	Warehou: Name	Order	Pos	1 Pos 2	OC order	Time Rece Re
BN0016571	1		- , p		04.02.19		-	00 01		Technok 🗭 12		0	200.00	
BN001241		receipt		2251	04.02.11	-/ James	bonds 5.0	0001		rechnok 4/ 12	25 10	v		
SN00124620														
SN00124621														
SN00124622														
SN00124622														
SN00124623														
SN00124624														
	-													
<	>	<												2
<u>O</u> K C	ancel	Detail												

In this example, all the batch and serial numbers are displayed on the **Contains** tab which are linked to **BN0016571** – as described in <u>Section 1.1 Example</u>.

If an item is directly linked to another item, the associated batch or serial number is displayed in black. If an item is only indirectly linked to another item, the associated batch or serial number is greyed out.

For more information, see the description of the field *Range* in <u>Section 2.1 Header</u>.

#### 2.1. Header

This section describes the fields in the header of the **Batches and Serial Number tracing** window.

Batches and Ser	ial Number tracing								_ 🗆 X
Item	-> FG0056	▼ 🖲	Finished good	l - table			Delivery Note	Yes	
Batch number	BN0016571	-	Status	released	Inventory	5.000	Range	All	

*Item*: The item code of the selected item.

Batch number: The batch or serial number that you want to trace in the system.

The default name of this field is **Batch number**. However, if you select a serial number in this field, the name of the field will be displayed as **Serial number**.

*Description*: A description of the item selected in the **Item** field.

The information in this field is defined in the **Item Master Data**. To modify this information, go to **Inventory** > **Item Master Data**.

*Status*: The status of the selected item in the system. The possible values of this field are the following:

- Locked
- Released
- No access

*Inventory*: The quantity of the item in stock and the Unit of Measure (UoM).

*Delivery Note*: Specifies whether delivery note information is displayed related to the selected batch or serial number. The possible values of this field are the following:

- Yes: If this value is selected, a **Delivery Note** tab is displayed on the right-hand side panel below the header (see <u>Section 2.5 Delivery Note Tab</u>). If there is any delivery note created for this item in SAP Business One, information about the delivery note(s) is displayed on this tab.
- No: If this value is selected, no Delivery Note tab is displayed in the Batches and Serial Number tracing window.

*Range*: Specifies the range of items and transactions that are be displayed for the specified item. The possible values of this field are the following:

- **Direct**: If this value is selected, the system displays all items that are directly linked to the selected batch or serial number. For example:
  - A batch linked to another batch through a batch transfer or split batch transaction (for an example, see <u>Section 3.1 Example Batch Transfer</u>).
  - A raw material item used in a finished good where the goods receipt of the finished product and the issue for production of the raw material item are reported together in the same process. For example:
    - Backflushing booking process (for an example, see <u>Section 3.2 Example Backflushing</u>)
    - Order time receipt automatic material posting at the last operation sequence (for an example, see <u>Section 3.3 Example Production Time Receipt Automatic Material</u> <u>Posting at Last Operation Sequence</u>)
- Indirect: If this value is selected, the system displays all items that are indirectly linked to the selected batch or serial number. For example:
  - A raw material item that is included in a finished product, but there is no transaction that would directly relate the two items. For example, the goods receipt of the finished product and the issue for production of the raw material are posted as two separate transactions.

In cases where there are many items indirectly related to the selected batch or serial number on multiple levels, using the indirect calculation method may be very time-consuming.

• All: If this value is selected, the system displays all items that are directly or indirectly linked to the selected batch or serial number.

#### 2.2. Contains Tab

The **Contains** tab displays an overview of all the batch and serial numbers that are linked to the specified item.

			1.0								_	
	FG0056			Finished good					elivery No	te	Yes	
itch number 🛛 🔍	BN0016571		▼ 🗉	Status	released	Inventory	5.000	R	ange		All	
Contains Used	10	Documents	Delivery Note									
	_				<b>a</b> 14	o 17 14 1						
Number		# Document Typ		Date	Personnel Name	Quantity Warehou		Order			QC order	Time Rece Re
BN0016571	1	L receipt	📫 2251	04.02.19	🗘 🖓 James Bonds	5.000 01	ada 🤝	Technok 🗘 1229	5 10	0		
BN001241												
🕋 SN00124620												
SN00124621												
🕋 SN00124622												
SN00124623												
SN00124624	1											
		_										
¢	>	<										1
	>	٢										2

The system displays an overview of the items indicating how the items are related to one another. For example, which serial or batch number is included in which semi-finished or finished item.

Each item on this tab is marked with one the following icons:

- 🕮 : indicates that the item is locked
- 🕮: indicates that the item is released
- 🕮 : indicates that the item is not accessible

If an item is directly linked to another item, the associated batch or serial number is displayed in black. If an item is only indirectly linked to another item, the associated batch or serial number is greyed out.

In this example, the raw material items are indirectly linked to the finished product (**BN0016571**), because the issue for production transaction of the raw material items and the goods receipt of the finished product are posted as two separate transactions.

To display more information about any of the batch or serial numbers in this window, select the item on the **Contains** tab and click the **Detail** button at the bottom of the page.

m 🛋	FG0056			- 3	Finished go	od - table					De	livery No	ha	Yes	
	BN0016571			- U	Status	released		Inventory	5.00	0		nge		All	
	01100103/1				210103	1 cheaded		intencery	5100		102			1.11	
Contains Used	li	Documen	nts De	livery Note											
Number		Docume	nt Type	Number	Date	Pers	onnel Name	Quantity Warehou	Warehous Name		Order	Pos 1	Pos 2	QC order	Time Rece R
BN0016571	1	receipt		⇒ 2251	04.02.1	19 🖘 🔅	James Bonds	5.000 01	🖙 Al	A Technok	1225	10	0		
BN001241															
SN00124620															
SN00124621															
SN00124622															
SN00124623															
SN00124624															
_		_													
1	>	<													
OK	Cancel	Detail													

This opens the **Batches and Serial Number tracing** window of the selected item.

em	RM001		- 3	Table leg				Deli	very Not	e	Yes	
atch number	BN001241		- 3		released	Inventory	0.000	Ran			All	
Contains U	Jsed i	Documents De	livery Note									
Number	/seu l	# Document Type	Number	Date	Personnel Name	Quantity Warehou	WarahourNama	Order	Dog 1	Dog 7	OC order	Time Rece Res
BN001241	_		Number > 709	04.02.19	Personner Name	40.000 01		order	PUSI	PU5 2	QC order	Time Receives
BI4001241			→ 709		James Bonds	-20.000 01	Lumarx     ADA Technok	1775	10	10		
		2 issue 3 issue	<ul> <li>1597</li> <li>1598</li> </ul>		James Bonds	-20.000 01	ADA Technok			10		
		3 ISSUE	- 1550	04.02.15	James bonds	-20.000 01	ADA Technok	1220	10	10		
¢	3	٢										ſ

### 2.3. Used in Tab

The **Used in** tab displays all the items that a specific batch or serial number is included in.

#### Select an item on the **Contains** tab.

em 🤤 FG	0056		- 3	Finished good	I - table			0	elivery No	te	Yes	
tch number 🛛 📫 BN	0016571		- 3	Status	released	Inventory	5.000	R	ange		All	
Contains Used i	ſ	Documents De	livery Note									
Number	#	Document Type	Number	Date	Personnel Name	Quantity Warehous	Warehou: Name	Order	Pos 1	Pos 2	QC order	Time Rece R
BN0016571	1	Goods receipt	- 709	04.02.19		40.000 01	-> Lumarx					
BN001241	2	issue	📫 1597	04.02.19	James Bonds	-20.000 01	ADA Technok	🤤 122	5 10	10		
SN00124620	3	issue	🤝 1598	04.02.19	🤤 James Bonds	-20.000 01	ADA Technok	- 122	6 10	10		
SN00124621												
SN00124622												
SN00124623												
SN00124624												
4	>	<										

Then, click the **Used in** tab to display all the items that the selected batch or serial number is included in.

em	-	FG0056				• 0	Finished good	d - table				D	elivery No	te	Yes	
atch number		BN001657	1				Status	released	Inventory	5.000			inge		All	
		_	_													
Contains	Used i			Documents	Deliver	ry Note										
Number			#	Document T	ype I	Number	Date	Personnel Name	Quantity Warehous	Warehous Name	4	Order	Pos 1	Pos 2	QC order	Time Rece Re
BN001657	1		1	receipt		⇒ 2251	04.02.19	James Bonds	5.000 01	ADA	Technok	0 1225	10	0		
		>		x												
		>		4												
		>		¢.												
Ōĸ		>		Detail												

In this example, the selected item is only included in the finished product **BN0016571**.

For an example where an item is used in several batch or serial numbers, see <u>Section 3.4 Example – Used in Tab</u> – Item Used in Several Batch or Serial Numbers.

#### 2.4. Documents Tab

The **Documents** tab displays the documents for all transactions that are related to the item selected on the **Contains** tab.

FG0056 BN0016571			Finished good -								
				released	Inventory	5.000		very Not	e	Yes	
- BIN0016571		• •	status r	eleased	Inventory	5.000	Ran	ge		All	
i	Documents Del	ivery Note									
	# Document Type	Number	Date	Personnel Name	Quantity Warehous	Warehou: Name	Order	Pos 1	Pos 2	QC order	Time Rece R
1	Goods receipt	⇔ 709	04.02.19		40.000 01	🗘 Lumarx					
2	issue	⇒ 1597	04.02.19	📫 James Bonds	-20.000 01	ADA Techno	ok 📫 1225	10	10		
0 3	issue	📫 1598	04.02.19	📫 James Bonds	-20.000 01	📫 ADA Techno	ok 🤿 1226	10	10		
1											
2											
3											
4											
2	<b>`</b>										
			Document Type Number     Soods receipt 709     Soods receipt	# Document Type             Number             Date          Date            1         Goods receipt	Pocument Type Number Date Personnel Name     Goods receipt	#     Document Type     Number     Date     Personnel Name     Quantity Warehout       1     Goods receipt     ♀     709     04.02.19     ♀     40.000     01       2     issue     ♀     1597     04.02.19     ♀     James Bonds     -20.000     01       3     issue     ♀     1598     04.02.19     ♀     James Bonds     -20.000     01	*       Document Type       Number       Date       Personnel Name       Quantity Warehou: Warehou: Name         1       Goods receipt       Q       709       04.02.19       40.000       01       Q       Lumarx         2       issue       Q       1597       04.02.19       Q       James Bonds       -20.000       ADA Techno         3       issue       Q       1598       04.02.19       Q       James Bonds       -20.000       Q       ADA Techno	*       Document Type       Number       Date       Personnel Name       Quantity Warehou: Warehou: Name       Order         1       Goods receipt       ©       709       04.02.19       Image: Date       40.000       01       Image: Date       1225         2       issue       ©       1597       04.02.19       Image: Date       -20.000       01       Image: Date       ADA Technok Image: Date       1225         3       issue       Image: Date       Image: Date	*       Document Type       Number       Date       Personnel Name       Quantity Warehous Warehous Name       Order       Pos 1         1       Goods receipt       © 709       04.02.19       Image: Construction of the second secon	*       Document Type       Number       Date       Personnel Name       Quantity Warehout Warehout Name       Order       Pos 1       Pos 2         1       Goods receipt       ©       709       04.02.19       04.02.19       40.000 01       ©       Lumarx       1       10         2       issue       ©       1597       04.02.19       ©       James Bonds       -20.000 01       ©       ADA Technok ©       1225       10       10         3       issue       ©       1598       04.02.19       ©       James Bonds       -20.000 01       ©       ADA Technok ©       1225       10       10	*         Document Type         Number         Date         Personnel Name         Quantity Warehout Warehout Name         Order         Pos 1         Pos 2         QC order           1         Goods receipt         ©         709         04.02.19         40.000 01         ©         Lumarx         Image: Cool of the second s

The **Documents** tab provides an overview of all transactions related to an item and allows the user to access all related documents directly from this window.

The fields that are displayed on the **Documents** tab depend on the configuration of the system. To modify the settings, right-click in the **Documents** window and select **Window Settings** in the pop-up window:

m 😔 FG0056			-	Finished good	I - table			Deli	very Not	e	Yes	
tch number 🛛 📫 BN00165	71		-	Status	released	Inventory	5.000	Ran	ge		All	
Contains Used i	ſ	Documents [	elivery Note									
Number	#	Document Type		1	Personnel Name	Quantity Warehou	Warehous Name	Order	Pos 1	Pos 2	QC order	Time Rece Re
BN0016571	1	Goods receipt	⇒ 709	04.02.19		40.000 01	🗢 Lumarx					
BN001241	2	issue	📫 1597	04.02.19	James Bonds	-20.000 01	ADA Technok	1225	10	10		
SN00124620	3	issue	🤤 1598	04.02.19	🤤 James Bonds	-20.000 01	ADA Technok	1226	10	10		
SN00124621												
SN00124622												
SN00124623					🛕 🚔 🖾							
SN00124624					my function e	and a standard						
					Window Settin	A REAL PROPERTY AND A REAL						
					0000	ngs						
					Detail							
					Last Messages							
. >		/										3

*Document Type*: Type of the transaction.

*Number*: Document number of the transaction.

*Date*: The date when the document was created.

*Personnel Name*: The name of the employee who created the document.

The name displayed in this field is the name of the employee in Beas, not the SAP user name.

Employees in Beas are administered in **Human Resources** > **Personnel**. The SAP user name can be connected to the Beas employee on the **Personnel administration** tab.

The system does not display an employee name in this field in the following cases:

- The employee was working without a terminal when creating the document.
- There is no connection between the SAP user name and the Beas employee name in the system.
- The document was not created in Beas.

*Quantity*: The posted quantity of the item.

Warehouse: The warehouse where the item is available in stock.

If the posted transaction is a transfer, this is the warehouse where the item is transferred from.

*Warehouse 2*: The target warehouse (used in cases where the described transaction is a transfer).

*Name*: Name of the customer or supplier.

Order: The Work Order linked to the transaction.

**Pos 1**: The assembly position linked to the transaction.

**Pos 2**: The BoM position linked to the transaction.

*QC-order*: The QC-order linked to the transaction.

*Time receipt*: Time receipt linked to the transaction .

Time receipt information is displayed only for transactions posted in Beas 9.0-000 Patch 3 in cases where the posting was created together with a time receipt. (For example, in a "production time receipt – automatic material posting at last operation sequence" process.)

Resource: Resource linked to the order time receipt .

*Reference*: Reference number of the posting document.

*Information*: Information coming from the linked document.

*Work station*: Work station on which the document was created. This information is displayed only if the document was created in Beas.

#### 2.5. Delivery Note Tab

The **Delivery Note** tab displays the delivery note related to a batch or serial number, if there is a delivery note related to the selected item:

Contains Used	Documents D	Delivery Not				
Number	# Documen Line	Date Custome Name	Invoice Address	Delivery Address	Item	Batch
SN367	1 🗢 146 1	09.04.201 🗢 C20(Müller AG	Goethe Str. 246934	5 B GERMANY	⇒ FT_QS	SN367

The **Delivery Note** tab allows the user to open the source delivery note document directly from this window. It is also possible to access all information in the delivery note directly on this screen. For example, information about the item that was delivered or information about the customer, and so on.

The fields that are displayed on the **Delivery Note** tab depend on the configuration of the system. To modify the settings, right-click in the **Delivery Note** window and select **Window Settings** in the pop-up window:

Contains Used	Documents I	Delivery Not					
Number	# Documen Line	Date Customer	Name	Invoice Address	Delivery Address	Item	Batch
- 📺 SN367	1 🗢 146 1	09.04.201 ⇒ C20001	Müller AG	Goethe Str. 2469345	BGERMANY	FT_QS_SER	SN367
ULL (1998)				Deta	ow Settings		

#### 3. SPECIAL CASES

This section provides a description on special cases related to the values described in Section 2 ROCESS.

#### 3.1. Example – Batch Transfer

This section provides an example where a batch item was transferred into another batch item.

ltem 🖘 🖡	RM001		<b>-</b> 🗉 T	able leg				0	elivery No	te	Yes	
	BN001243				released	Inventory	0.000		ange		All	
Contains Used i			livery Note									
Number	#	Document Type	Number	Date	Personnel Name	Quantity Warehous	Warehou: Name	Order	Pos 1	Pos 2	QC order	Time Rece Res
BN001243	1	Goods receipt	🖙 711	05.02.19		35.000 01	🗘 Lumarx					
BN001242	2	Batch transfer	🤝 56	05.02.19	📫 James Bonds	5.000 01						
	3	issue	-> 1613	05.02.19	📫 James Bonds	-40.000 01	📫 ADA Techno	k 📫 122	3 10	10		

In this example, the batch number **BN001242** was transferred into **BN001243**. The item **BN001243** was then used in a Work Order (**1228**) to create a finished product (**BN0016572**).

If you search for the item **BN001243** in the "Batches and Serial Number Tracing" window, you can see that the item is directly linked to **BN001242**. You can also see all the transactions directly related to **BN001243** on the **Documents** tab.

If you select **BN001242**, the system will display the transactions related to this item.

em 📫 RM001		▼ 🗉	Table leg				De	livery Note	Yes	
tch number 🛛 👄 BN0012			Status	released	Inventory	0.000		nge	All	
Contains Used i		elivery Note		-						
Number	# Document Type	Number	Date	Personnel Name	Quantity Warehous		Order	Pos 1 Po	s 2 QC order Ti	me Rece Re
BN001243	1 Goods receipt	🗢 711	05.02.19		5.000 01	Lumarx				
BN001242	2 Batch transfer	🤝 56	05.02.19	📫 James Bonds	-5.000 01					
		_								
										2
¢ 2	< <									
: 3										

If you click the **Used in** tab with item **BN001242** still selected on the **Contains** tab, the system displays the following:

	RM001		- 3	Table leg				Deli	very Not	e	Yes	
itch number 🛛 📫	BN001243		- 3	Status	released	Inventory	0.000	Ran	ge		All	
Contains Used i	1	December 1		1								
			elivery Note	1	_			-		-		
Number		# Document Type	Number		Personnel Name	Quantity Warehous		Order	POS 1	POS 2	QC order	Time Rece Re
BN001243	1	and the second second second	⇔ 711	05.02.19		35.000 01	🗘 Lumarx					
BN0016572	2		-> 56	05.02.19		5.000 01		4330				
	3	issue	🤤 1613	05.02.19	🤤 James Bonds	-40.000 01	ADA Technok	1228	10	10		
	>	¢										1
	>	¢										1
												3
QK	> Cancel	< Detail										

On this screen, you can see that **BN001242** is only used in **BN001243**, and that **BN001243** is indirectly linked to the finished product, that is, **BN0016572**. The reason why these two items are indirectly linked is that the

goods receipt of **BN0016572** and the issue for production of **BN001243** were posted as two separate transactions in the Work Order.

em 📫	FG0056			-	Finished good	d - table			Deli	very Not	e	Yes	
itch number 🛛 👄	BN00165	72		▼ 🗉	Status	released	Inventory	16.000	Ran	ge		All	
Contains Used i	1	D	ocuments	Delivery Note									
Number	^	# [	Document Typ		1	Personnel Name	Quantity Warehous V	Varehou: Name	Order	Pos 1	Pos 2	QC order	Time Rece Re
BN0016572		1 1	receipt	⇔ 2252	04.02.19	James Bonds	3.000 01	🖙 ADA Tec	hnok 🗭 1226	10	0		
BN001241		2 r	receipt	⇒ 2253	04.02.19	📫 James Bonds	3.000 01	📫 ADA Tec	hnok 📫 1227	10	0		
SN00124625		з г	receipt	⇒ 2255	05.02.19	📫 James Bonds	10.000 01	📫 ADA Tec	hnok 📫 1228	10	0		
SN00124626													
SN00124627													
SN00124628													
SN00124629													
BN0011242													
SN00124630													
SN00124631													
SN00124632													
A SN00124633													
A SN00124634													
A SN00124635													
SN00124640													
SN00124641													
SN00124647													
SN00124648													
SN00124649													
	<b>v</b>												
BN001243	<b>-</b> j - j	<											2

If you search for the finished product, **BN0016572**, you can see the following:

On this screen, you can see that **BN0016572** contains **BN001243**, which is directly linked to **BN001242** (batch transfer). **BN001242** is also included on the list as an item which is indirectly related to the finished product itself (**BN0016572**).

#### 3.2. Example – Backflushing

This section provides an example where items were posted in a backflushing booking process.

m	FG0056		▼ 🗉	Finished goo	d - table			De	ivery No	te	Yes	
tch number	➡ BN0016575		-	Status	released	Inventory	5.000		nge		Direct	
	Jsed i	Documents	Delivery Note	1								
Number		# Document Ty	· · · · · · · · · · · · · · · · · · ·		Personnel Name	Quantity Warehou		Order		Pos 2	QC order	Time Rece Re
BN0016575		1 receipt	⇒ 2259	05.02.19	⇒ James Bonds	5.000 01	🖙 ADA	Technok 🗘 1231	10	0		
SN00124	1666											
SN00124	1667											
SN00124												
SN00124	4669											
SN00124	4670											
BN00124	46											
c	>	<										>
	_											

In this example, **BNoo16575** is a finished product, while the following are raw material items:

- SN00124666
- SN00124667
- SN00124668
- SN00124669
- SN00124670
- BN001246

The goods receipt of **BNoo16575** was posted in a backflushing process, together with the issue for production transaction of the raw material items. Thus, the raw material items are directly related to **BNoo16575**, as indicated in the screenshot above.

# 3.3. Example – Production Time Receipt – Automatic Material Posting at Last Operation Sequence

This section provides an example where items were posted in a "production time receipt – automatic material posting at last operation sequence" process:

iteries and sei	rial Number t	racing										
em	-> FG0056		- B F	inished good	d - table			Deli	very No	te	Yes	
atch number	BN001657	3	🔻 🗉 s	tatus	released	Inventory	5.000	Ran	ge		Direct	
Contains	Used i		Delivery Note									
Number		# Document Typ	e Number	Date	Personnel Name	Quantity Warehou	Warehous Name	Order	Pos 1	Pos 2	QC order	Time Rece Re
BN0016573	1. S.	1 receipt	🖙 2257	05.02.19	James Bonds	5.000 01	🖙 ADA	Technok 🗭 1229	10	0		
(BN0012	44											
SN0012	4650											
SN0012	4651											
SN0012	4652											
SN0012	4653											
SN0012	4654											
c	>	<										
<u>O</u> K												
	Cancel	Detail										

In this example, **BNoo16573** is a finished product, while the following are raw material items:

- SN00124650
- SN00124651
- SN00124652
- SN00124653
- SN00124654
- BN001244

The goods receipt of **BNoo16573** was posted automatically together with the issue for production transaction of the raw material items in a "production time receipt – automatic material posting at last operation sequence" process. Thus, the raw material items are directly related to **BNoo16573**, as indicated in the screenshot above.

#### 3.4. Example – Used in Tab – Item Used in Several Batch or Serial Numbers

This section provides an example where an item is included in several batch or serial numbers:

em 📫 RMO	01	<b>-</b> (1)	Table leg				Deliv	ery Not	e	Yes	
tch number 🛛 📫 BN00	011242	<b>-</b> (B)	Status	released	Inventory	0.000	Rang	<u>je</u>		All	
Contains Used i	Documents Deli	very Note									
Number	# Document Type	Number	Date	Personnel Name	Quantity Warehous V	Varehou: Name	Order	Pos 1	Pos 2	QC order Ti	me Rece Re
BN0011242	1 Goods receipt	🤿 710	04.02.19		40.000 01	📫 Lumarx		_			
BN0016572	2 issue	📫 1599	04.02.19	🤤 James Bonds	-12.000 01	ADA Technol	1226	10	10		
BN0016574	3 issue	🤝 1600	04.02.19	📫 James Bonds	-12.000 01	ADA Technol	4 1227	10	10		
BN0016576	4 issue	🖘 1627	05.02.19	🗘 Rudolf Hansi	-16.000 01	ADA Technol	🗘 1230	10	10		

In this example, item **BN0012242** is included in the following finished products:

- BN0016572 (Work Order 1226)
- BN0016574 (Work Order 1227)
- BN0016576 (Work Order 1230)

**BN0012242** is a batch item which contains 40 raw material items. As indicated in the screenshot above, the items included in this batch are used in three different finished items in three different Work Orders:

- 16 items were used in **BN0016572** (Work Order 1226)
- 12 items were used in **BN0016574** (Work Order 1227)
- 12 items were used in **BN0016576** (Work Order 1230)

#### 4. CONFIGURATION WIZARD

This section provides a description on how to use the Configuration Wizard to set up the "Batches and Serial Number Tracing" function.

To set the parameters related to the "Batches and Serial Number Tracing" function, open the **Configuration** wizard, and go to Materials management > Batch management > Batches and Serial Number tracing

Confi	guration wizard		_ = ×
19	Production		^
	Quality control		
- E.	Materials management		
	Batches Administrate Serial Numbers Administrate MRP Waard Purchase request Purchase Goods receipt Manual Entries Complaint Inventory Warehouse Management Batic ettings batch status for material receipt	released	
۳	In production and goods receipt, batches can be generated autom	reveased straby. When defining them, the user can specify which counter should be used. The	
	relevant counters can be set here.		
	Counter 1     Counter 2     Counter 3     View Oetail	72 1 1	
F	Batch transfer     Batches and Serial Number tracing     Every Batch only one time	E.	
	Max., allowed levels	10	
	Max allowed lines	200	
	Calculation		_
<u> 6</u> 6	Attendance		
			~
	OK Cancel Expand Search co	ontinue search	۷

The following parameters are available:

• *Every Batch only one time*: If the checkbox for this option is ticked (default), each batch or serial number is displayed only once in the item overview. Thus, recursive resolutions are prevented.

#### Example:

SN00123876 >SN00127789 > SN00123876 >SN00127789

In this example, SN00123876 includes SN00127789, and SN00127789 includes SN00123876.

This scenario may occur at cancelations, incorrect bookings, and so on.

If a batch or serial number must be used multiple times, the "**Every Batch only one time**" option must be disabled.

#### Example:

Finished product A Semi-finished product B1 BN00126785 Semi-finished product B2 BN00126785

If the same batch or serial number is included in both semi-finished products (sub-assemblies), the item is only displayed twice if the "Every Batch only one time" option is disabled.

This scenario may occur, for example, when you have a batch item which contains 4 pieces of an item, and 2 of those items are used in semi-finished product B1, while the other 2 are used in semi-finished product B2.

#### Example:

If a partial posting has been issued for a batch or serial number multiple times, the partial posting is only displayed correctly if the "**Every Batch only one time**" option is disabled.

In this example, "batch-assembly-level2" has been issued for "batch-assembly-level1" twice, so "batch-assembly-level2" is displayed in the overview twice:

Contains Used i	
Number	Item
0044	batch-assembly-level1
0043	batch-assembly-level2
E. ( 0041	batch-assembly-level1
0040	batch-assembly-level2
BRM0609	po_batchauto
0043	batch-assembly-level2
0041	batch-assembly-level1
0040	batch-assembly-level2
BRM0609	po_batchauto

• Max. allowed levels: Defines the maximum allowed levels in the item overview. The default value is 15.

An upper limit must be set for the number of item levels displayed in the overview to avoid falling into a permanent loop in a recursive case. The higher the upper limit, the slower the system becomes in a recursive case.

An upper limit of 10 item levels is optimal if a batch does not move more than 10 times from one assembly to another.

• Max. allowed lines: Defines the maximum allowed rows in the item overview. The default value is 200.

An upper limit must be defined for the number of rows displayed in the overview to avoid receiving a very long result in cases where there are incorrect postings issued for an item. The higher the upper limit, the slower the system becomes in case there are incorrect postings.