



MANUFACTURING EXECUTION SYSTEM
FOR MICROSOFT DYNAMICS NAV

NAVEKSA A/S
Version 1.0.0.0

Using the ShopFloor Operator client

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NAVEKSA A/S

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1. How to run ShopFloor as an operator

How to run ShopFloor as an operator

This manual explains in detail how the ShopFloor Operator terminal is operated..

This manual comprises all functions available.

Not all functions may not be relevant in your company.

1.1. The Operator execution screen

The Operator execution screen

The ShopFloor execution screen is very intuitive and basically self-explaining on what to do.

It can be operated by using a mouse, fingertouch if you have a touch screen, or barcode reading can be used.

It wakes up pressing the icon on your terminal:



The display for the first ressource defined shows up.

1.1.1. Using the ShopFloor Operator screen

Using the ShopFloor operator display

The ShopFloor execution screen presents per chosen resource 3 sections with production order operations:

- Orders processing (Running)
- Orders queuing (Waiting)
- Future orders (Arriving)

This is an excellent way to get an overview on what is going on a machine, a group of machines, a person or other resources.

When using the display you only need to deal with a few actions:

Choose a resource for execution

Select this:

NAVEKSA A/S Shop Floor SYSTEM - DEMO, dynamicsnav110 - 8.09.01

SHOP WORK LIST 200 - Forpakning (Packing) End Week: 3.17 Hours ☒ Show All Choose default user

ORDERS PROCESSING 200

Status	Start	Multiple Lines	Prod.Res.
414	<input type="checkbox"/>	<input type="checkbox"/>	110
413	<input type="checkbox"/>	<input type="checkbox"/>	110
277	<input type="checkbox"/>	<input type="checkbox"/>	AH
386	<input type="checkbox"/>	<input type="checkbox"/>	110
405	<input type="checkbox"/>	<input type="checkbox"/>	120
404	<input type="checkbox"/>	<input type="checkbox"/>	120

ORDERS QUEUEING 200 (2)

Start	Multiple Lines	Machine Ctr.	Customer
<input type="checkbox"/>	<input type="checkbox"/>	200	

Please choose Production Resource

Please choose Production Resource

Search

Code	Name	Type	Work Center Gro	Work Center No.
100	Montage (Assembly)	Arb.center	2	
200	Forpakning (Packing)	Arb.center	2	
300	Maling (Painting)	Arb.center	2	
400	Bearbejdning (Machining)	Arb.center	2	
CUT	cutting and packaging	Arb.center	2	
EXTRUDING	Extruding	Arb.center	2	
P19	P19 work center	Arb.center	1	
POST	Postproduction	Arb.center	1	

OK Cancel

What am I supposed to work on next?

Click on the top line in the Orders queuing section for a new order, or select an active order which have being paused or other..

*When clicking on a line, some of the function buttons to the right becomes dark blue. This means we want to tell you something about the execution.

- Show my jobs. You can click here and see what you are working on.
- Start a job

- You must click on each of them to see various pieces of information

The display has the following intuitive features when using it:

Green status means the job is running (being worked on). White status means the job is paused, but still active.

The run number is number which is used together with bundled production to keep all lines together under one single run number.



ORDERS RI

Status	Start	M
292	<input type="checkbox"/>	
288	<input type="checkbox"/>	
288	<input type="checkbox"/>	
214	<input type="checkbox"/>	
216	<input type="checkbox"/>	
288	<input type="checkbox"/>	
290	<input type="checkbox"/>	

- All fields includes "Mouse over" full text capability:

TRACK_QC	Lot-/serial tracked and quality-controlled item	TRA
FX-60	NAV demo item	FX-t
NAV demo item		

SHOW MY JOBS	START JOB	OUTPUT	BOM	ROUTE	DRAWING	PROCES NOTE	ORDER NOTE	POST MAT.	PALLET LABEL	CLOCK IN	CLOCK OUT	QA	Data updated by background process
--------------	-----------	--------	-----	-------	---------	-------------	------------	-----------	--------------	----------	-----------	----	------------------------------------

- All columns can be sorted in ascending or descending order: Notice the small arrow in "Operation number"




No.	Operation No.	Op. Des
0	02000	Control
CK_QC	02000	QC and


- The 3 sections can be expanded/collapsed as wanted:

ORDERS QUEUEING 200 (2)			
Start	Multiple Lines	Machine Ctr.	Customer
<input type="checkbox"/>	<input type="checkbox"/>	200	

- A search bar or filter function is available for each section searching for a specific order or a

general data filter function can be applied to the full screen:

rpakning (Packing)  End Week: 3.17 Hours ☒ Show All  


Search  ☒ Show inactive jobs **Setup 245 / Run 260**

ie Ctr.	Customer Order	Prod. Order No.	Item No.	Description	Route No.	Operation No.	Op. Description	Quantity	Due Date	Priority	Previous C
---------	----------------	-----------------	----------	-------------	-----------	---------------	-----------------	----------	----------	----------	------------

- Clicking on a flag changes the language on the screen and moving the function buttons – right, top or bottom as wanted:




- A “Show all” button expands or collapses bundled orders:

ek: 3.17 Hours ☒ Show All 

- Button for showing active jobs only:

☒ Show inactive jobs **Setup 245 / Run 260**

Setup 65 / Run 70 

Description	Route No.	Operation No.	Op. Description
NAV demo item	FX-60	02000	Control and pack
Lot-/serial tracked and quality-controlled item	TRACK_QC	02000	QC and packing

- Button for showing total hours of work left within a chosen ending week.

 **SHOP WORK LIST** 200 - Forpakning (Packing)  

End Week: ▼ 3.17 Hours

☒ 1 inactive jobs

Setup **Run**

Description	
NAV demo item	
Lot-/serial tracked and quality-controlled	

Choose a default user to avoid selecting the same operator/machine over and over:

17 Hours ☒ Show All Choose default user ▼

inactive jobs **Setup 245**

Description	No.
serial tracked and quality-controlled	
serial tracked and quality-controlled	
lig vare	
s lot-/serienr og kvalitetsstyring	
serial tracked and quality-controlled	
demo item	

Choose default user

- Jesper Ræbild
- Daniel Goldschmidt
- Anders Riis
- Pakkebord 1 (Packing 1)
- Pakkebord 2 (Packing 2)
- Pakkemaskine (Auto packaging)
- Malekabine (Painting cabin)
- Malerobot (Painting robot)
- Tørrekabine (Drying cabin)
- Inspektion (Inspection)
- Boremaskine (Drill)
- CNC-maskine
- Maskinafgratning (Deburring)
- Maskininspektion (Inspection)

Message button – info are in white, warnings are in yellow, and errors are in red:

CLOCK OUT

QA

LeftShift

Code Cu

1.2. Using the ShopFloor execution functions

Using the ShopFloor execution functions

This manual comprises all functions available.

Not all functions may not be relevant in your company.

1.2.1. Starting a single job

Starting a single line production order operation

On the top of the window, you have to choose which work center / production resource's jobs, you would like to see.

ORDERS PROCESSING 100 (3) Search ☒ Show inactive jobs Setup 15 / Run 534

Status	Start	Multiple Lines	Prod. Order No.	Item No.	Prod.Res.	Description	Customer Order	Prod.res. Type	Machine Ctr.	Operation No.	Op. Description	Quantity	Finished	Quantity ready	Quantity completed	Send-Ahead Quantity	Due Date	Capacity Date
64	<input type="checkbox"/>	<input type="checkbox"/>	101036	1000	120	Cykel		Prod.res.	110	10	Jesper Ræbild	7	0%	0	0	0	05-02-2016	03-02-2016
81	<input type="checkbox"/>	<input type="checkbox"/>	101034	1000	210	Cykel		Arb.center	100	20	Kædesamling	10	0%	10	0	0	09-02-2016	05-02-2016
79	<input type="checkbox"/>	<input type="checkbox"/>	101038	1125	120	PLADEHJUL Lot		Arb.center	100	10	Samleafdeling	10	0%	0	0	0	09-02-2016	08-02-2016

In the window showing "Orders queuing", the orders that are going to be processed on the particular work center, are displayed.

Jobs can be started, either by placing the cursor on the particular line, Please observe if any function buttons become dark blue. Click on each of them to see additional execution information

ORDERS QUEUEING 100 (6) Search Setup 230 / Run 357

Start	Multiple Lines	Prod. Order No.	Item No.	Prod.Res.	Description	Customer Order	Prod.res. Type	Machine Ctr.	Operation No.	Op. Description	Quantity	Finished	Quantity ready
<input type="checkbox"/>	<input checked="" type="checkbox"/>	101037	1000		Cykel		Arb.center	100	30	Endelig samling	3	0%	3
<input type="checkbox"/>	<input type="checkbox"/>	101029	1001		Turcykel		Prod.res.	110	20	Jesper Ræbild	7	0%	7

and then choosing "Start job", (depending of the set up, you may be asked to issue material, or you may receive a message that the job can not be started due to material shortage – please see below.

Now you have to select, key or wand from a barcode device which employee/machine center has to perform the particular job, and press OK.

You have started the job

You have started the job

Production Order No.

101037

Prod. res.

Choose prod. res.

Operation No.

30

Starting Date

10-11-2015

Starting Time

12:37:06

Print Job Tag

☐ Yes
☒ No

OK

Cancel

The job will now be moved to Orders processing, having assigned a sequence number, that is highlighted in green:

⊙ **ORDERS PROCESSING 100 (4)** Search ☒ Show inactive jobs **Setup 25 / Run 594**

Status	Start	Multiple Lines	Prod. Order No.	Item No.	Prod.Res.	Description	Customer Order	Prod.res. Type	Machine Ctr.	Operation No.	Op. Description	Quantity	Finished	Quantity ready	Quantity completed	Send-Ahead Quantity	Due Date	Capacity Date	Previous Op
62	<input type="checkbox"/>	<input type="checkbox"/>	101037	1000	130	Cykel		Arb.center	100	30	Endelig samling	3	0%	3	0	0	04-02-2016	03-02-2016	20

Once the job has been completed, it has to be reported as completed. (Dependend of the set up, you might be asked to issue material, before the job can be completed – if no material has been issued, the key “Issue material” is highlighted dark blue).

1.2.2. Starting a bundled job

Starting a bundled job

* You should only read this chapter if you are performing bundled job execution. I.e. performing the same process across multiple production orders simultaneously.

The system allows to start several order lines at once by marking "Start" next to the particular lines you want to start at the same time.

In case of a production order, created either through a project order, or as a family order, and if "Show all" has not been marked, all lines on the order will be started, when the particular line is selected.

⬆ **ORDERS PROCESSING 100 (1)** Search ☒ Show inactive jobs **Setup 25 / Run 234**

Status	Start	Multiple Lines	Prod. Order No.	Item No.	Prod.Res.	Description	Customer Order	Prod.res. Type	Machine Ctr.	Operation No.
83	<input type="checkbox"/>	<input checked="" type="checkbox"/>	101034	1000	140	Cykel		Arb.center	100	



SHOP WORK LIST 100 - Samleafdeling End Week: 0 Hours ☒ Show All

⬆ **ORDERS PROCESSING 100 (3)** Search ☒ Show inactive jobs **Setup 25 / Run 234**

Status	Start	Multiple Lines	Prod. Order No.	Item No.	Prod.Res.	Description	Prod.res. Type	Machine Ctr.	Operation No.	Op. Description
83	<input type="checkbox"/>	<input type="checkbox"/>	101037	1000	140	Cykel	Arb.center	100	30	Endelig samling
83	<input type="checkbox"/>	<input type="checkbox"/>	101036	1000	140	Cykel	Prod.res.	110	10	Jesper Ræbild
83	<input type="checkbox"/>	<input type="checkbox"/>	101034	1000	140	Cykel	Arb.center	100	20	Kædesamling

Depending on the specific task, it is now possible to combine orders within each section (ORDERS PROCESSING, ORDERS QUEING, FUTURE ORDERS).

By putting a checkmark in "Show All", you put a "X" in the orders that you want to start together. This can be carried out accros order numbers.

Please note that orders belonging to "FUTURE ORDERS" have not yet been completed on the prior operations, and therefore probably will not be ready to be started on the operation concerned. The option of starting an order line from "FUTURE ORDERS" therefore should only be used, if you know for sure that the order is ready, but has just not been reported as completed on the previous operations.

The system now controls, which lines are manufactured together, and all lines are visible by putting a checkmark on "Show" all, or as a single family order line, by NOT having checkmarked "Show all". When reporting as completed, you have to accept or fill in the correct number, the number of scrapped items, or probably the "Reason code" for each production line of the family order, in "END JOB".

The example below only shows one family order for a single product, but it could also have been different products, which should simply undergo the same function. An example could be a steel plate

containing different components, but which are cut on a laser cutter from the same plate.

You can add/remove lines to an existing combination of orders running (identified with a run number)

1.2.3. Starting and adding a job to a pool of running jobs

Starting and adding a job to a already running job



You should only read this chapter if you are performing more jobs across multiple production orders simultaneously.

The system offers the opportunity to start a new order line and connect it to an already processing job.

Simply check mark the new order line to be started, and also check mark the order line, it shall be attached to.

NAVEKSA A/S Shop Floor SYSTEM - CRONUS Danmark A/S, dynamicsnav100 - 8.06.02

SHOP WORK LIST 100 - Assembly department End Week: 13.06 Hours ☒ Show All

⌵ **ORDERS PROCESSING 100 (3)** Search ☒ Show inactive jobs **Setup 182 / Run 3,535**

Status	Start	Multiple Lines	Prod. Order No.	Item No.	Prod.Res.	Description	Customer Order	Machine Ctr.	Operation No.	Op. Description	Quantity	Quantity ready
121	<input type="checkbox"/>	<input type="checkbox"/>	101094	MV2520	120	Fabricated item		100	01000	Fælgsamling	3	0
118	<input type="checkbox"/>	<input type="checkbox"/>	101095	FX-34	110	NAV færdig vare		100	01000	Samleafdeling	2	0
122	<input checked="" type="checkbox"/>	<input type="checkbox"/>	101094	FX-32	130	NAV demo item		100	01000	Samleafdeling	5	0

⌵ **ORDERS QUEUEING 100 (8)** Search **Setup 130 / Run 430**

Start	Multiple Lines	Prod. Order No.	Item No.	Description	Customer Order	Machine Ctr.	Operation No.	Op. Description	Quantity	Quantity ready	Quantity cor
<input type="checkbox"/>	<input type="checkbox"/>	101090	FX-33	NAV færdig vare		100	01000	Samleafdeling	2	0	0
<input checked="" type="checkbox"/>	<input type="checkbox"/>	101093	MV2520	Fabricated item		100	01000	Fælgsamling	2	0	0
<input type="checkbox"/>	<input type="checkbox"/>	101098	3463	Halvfabrikata 3		100	10	Samleafdeling	2	0	0
<input type="checkbox"/>	<input type="checkbox"/>	101098	3462	Fabricated item		100	10	Samleafdeling	2	0	0
<input type="checkbox"/>	<input type="checkbox"/>	101099	FX-33	NAV færdig vare		100	01000	Samleafdeling	2	0	0

The figure illustrates that I (the operator) wants to start order 101093 and connect it to an already running job 101094. If this job is operated by myself, I will now be running 2 jobs.

If the order I connect to, is operated by someone else, the situation is that 2 people are now working on order 101094, but I am also working on order 101093 myself.

Please notice that before attaching order number 2 to the execution, you will be asked to pause (end) the first job, before you can start both jobs together.

1.2.4. Outputting a single job

Outputting a single job

Mark the concerned line and select “Output” on the main screen. Subsequently the following window will pop up:

StopJob

Item No	Starting Date	Starting Time	Prod. Res.
M-52	11-07-2016	13:05:49	130

Production Order No.	Item No	Item description	Output Quantity	Scrap Quantity	Status	End time
101028	M-52	Finished item j-1 product	0	0		15:30:23

7	8	9
4	5	6
1	2	3
0	,	Delete

Prod. Res. **130**

Output Quantity

Single operation

☐ Setup
☐ Part quantity
☐ Pause
☐ End operation

All operations

Setup

Part quantity

Pause all

End all operations

There is now an opportunity to carry out individual reporting as completed on the single lines, or, during all operations to mark, that the following reportings have to be made:

- Set up
- Partial output
- Pause
- End operation

If you select “End of operation” and fill in the expected number and press OK. If you have selected in the setup that start of the next operation has to be displayed as “Orders queuing”, the order line will disappear from the overview, showing “orders processing” and will appear on the next operation under “Orders queuing”.

If you have selected in the setup that the next operation will be displayed under “Orders processing”, the line in question will still be visible under “Orders processing”, if several operations on the job in the

particular work center have to be performed, or it will appear as “orders processing” under “next operation/work center”.

It is recommended in the setup to select that the next operation has to appear as queuing, then the operator always knows that new orders are started from “queuing”.

Various printing of pallet labels, product id tickets can be printed as part of the reporting.

This one is just an example: with item number, batch number, serial number etc.

Receiver 		Dock / Date 405 F10-A10-K		Material Handling Code 	
Delivery note or PLS No. (N) 3456789 		Supplier Address 			
Part No. (P) 90347789 		Net Weight (kg) 10		Gross Weight (kg) 14	
				No. of Boxes 1	
Quantity (Q) 160 		Description BOW A-RR SEAT BK BLOCKING			
Supplier DONS No. (V) 123456789 		Package Reference No. (B) OKLT6428 			
Serial (S) 504207 		Date D19.09.00		Engineering Change 15.05.00	
		Batch No. (H) C123456 		Security Sign 	

1.2.5. Outputting a bundled job

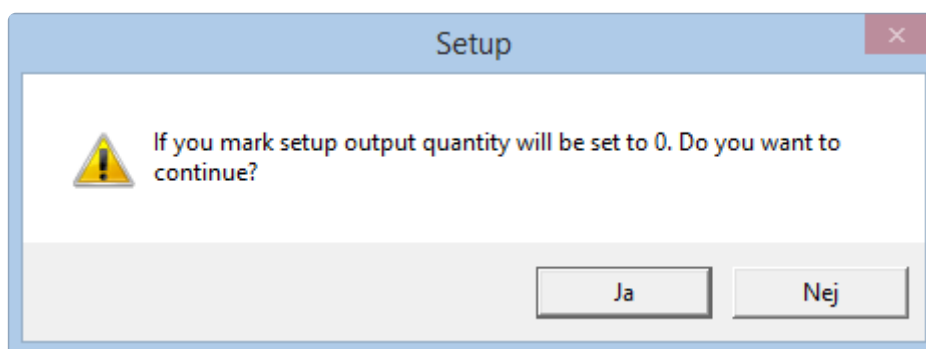
Outputting a bundled job

✿ You should only read this chapter if you are using bundled job execution.

There is an opportunity to carry out individual reporting as completed on the single lines, or, during all operations to mark, that the following reportings have to be made:

- Set up
- Partial reporting
- Interrupt (pause) all
- End all operations

1. If you select to report “setup”, the following message appears:



This should be answered with "Yes", in order to record the setup time.

2. If you select partial reporting for all lines, you have to report the number individually for each line. If you select partial reporting, the number is reported, and the order lines are restarted with a new sequence number.
- 3 If you select to interrupt (pause) all, the productions are stopped temporarily. If it has been selected in the setup, that the productions have to be stopped, when the employee concerned is clocking out, this corresponds to interrupt (pause) all of them.
- 4 If you choose “End all operations” the expected number is filled in automatically. For each line this number can be changed, and the number of discarded items/scrap, as well as the reason can be reported.

As mentioned the above can be combined individually, according to the picture below and be reported as completed in one step:

StopJob

Item No	Starting Date	Starting Time	Prod. res. no.
1000	10-11-2015	12:43:46	140

Production Order No.	Item No	Item description	Output Quantity	Scrap Quantity	Status	End time
101034	1000	Cykel	3	0	Part quantity	13:24:46
101037	1000	Cykel	0	0	Pause	13:24:21
101036	1000	Cykel	7	0	End operation	13:24:08

7	8	9
4	5	6
1	2	3
0	,	Delete

Prod. res. no. 140

Output Quantity 3

Single operation

☐ Setup
☒ Part quantity
☐ Pause
☐ End operation

All operations
Setup
Part quantity
Pause all
End all operations

Choose Location/Bin Print pallet label Scrap OK Cancel

Finally you have to press OK in order to carry out the selected functions.

There is also the opportunity to choose a function for one or several lines and let them be executed. If so, the lines concerned will be restarted automatically with a new sequence number.



Bundled orders

For the time being, using lot/serial number when issuing components or reporting output against/from bundled (family-) orders does not function or may function incorrectly. It does not matter whether you use pre-assigned lot/serial numbers on the production order, or lines are supposed to assigned/referred lot/serial information by the operator. We will make the lot/serial number functionality for pre-assigned lot/serial numbers for components and output quantities as soon as possible. We are currently unsure if we will make the operator assigned lot/serial number at output reporting.

1.2.6. Outputting a job from a pool of running jobs

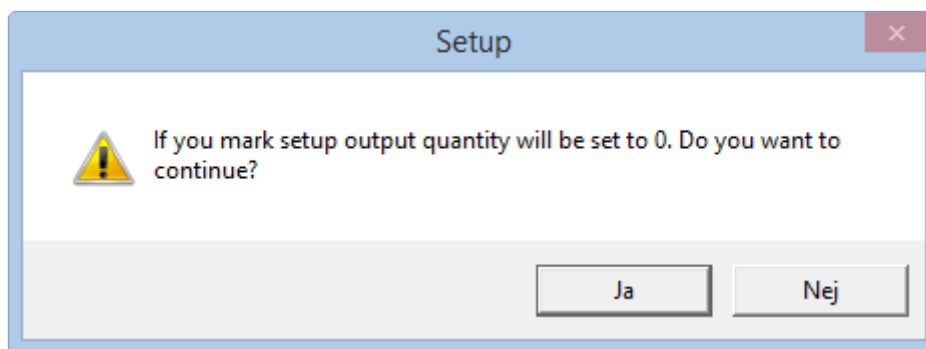
Outputting a job from a pool of running jobs

* You should only read this chapter if you are performing more jobs across multiple production orders simultaneously.

There is now an opportunity to carry out individual reporting as completed on the single lines, or, during all operations to mark, that the following reportings have to be made:

- Set up
- Partial reporting
- Interrupt (pause) all
- End all operations

If you select to report “setup”, the following message appears:



This should be answered with “Yes”, in order to record the setup time.

Re 2.

If you select partial reporting for all lines, you have to report the number individually for each line. If you select partial reporting, the number is reported, and the order lines are restarted with a new sequence number.

Re 3.

If you select to interrupt (pause) all, the productions are stopped temporarily. If it has been selected in the setup, that the productions have to be stopped, when the employee concerned is clocking out, this corresponds to interrupt (pause) all of them.

Re 4.

If you choose “End all operations” the expected number is filled in automatically. For each line this number can be changed, and the number of discarded items/scrap, as well as the reason can be reported.

As mentioned the above can be combined individually, according to the picture below and be reported as completed in one step:

StopJob

Stop job

Item No	Starting Date	Starting Time	Prod. res. no.
1000	10-11-2015	12:43:46	140

Production Order No.	Item No	Item description	Output Quantity	Scrap Quantity	Status	End time
101034	1000	Cykel	3	0	Part quantity	13:24:46
101037	1000	Cykel	0	0	Pause	13:24:21
101036	1000	Cykel	7	0	End operation	13:24:08

7

8

9

4

5

6

1

2

3

0

,

Delete

Prod. res. no.

140

Output Quantity

3

Single operation

☐ Setup
 ☒ Part quantity
 ☐ Pause
 ☐ End operation

All operations

Setup

Part quantity

Pause all

End all operations

Choose Location/Bin

Print pallet label

Scrap

OK

Cancel

Finally you have to press OK in order to carry out the selected functions.

1.2.7. Using variable material issue

Work with variable material issue

* You should only read this chapter if you are using variable material issue. Variable material issue when you have deviation, additions and other maintenance to the original production order bill of material.

In certain manufacturing processes, it may be necessary to manually enter the material consumption, because there is no mathematical relationship between material consumption and the final product. This can also be the case in process production, where you have to add material continually.

Therefore it is possible to manually enter the number / quantity of each product on the certain line, in the window "Material issue".

Item No.	Due Date	Description	Quantity per	Flushing Method	Requested	Expected Quantity	Quantity for issue	Location
1100	27-01-2016	Forhjøl	1 STK	Manual	6	6	2	
1200	27-01-2016	Baghjøl	1 STK	Manual	6	6	0	
1300	27-01-2016	Kædesaml	1 STK	Manual	6	6	0	

Buttons: Choose Location/Bin, Choose Lot, Add item, Issue materials, OK

The field "Issued" is automatically updated, when material is issued via the function "Issue material". There is also the opportunity to add a component, which is not a part of the standard of the BOM, via the function "Add component".

The list of the items is displayed and the component in question can be selected. It is possible to sort the list in ascending or descending order, or in alphabetical order. Furtheron you can search the number.

The selected item is now inserted in the BOM and the issued number has to be added:

Production Order Components

Item No.	Due Date	Description	Quantity per	Flushing Method	Requested	Expected Quantity	Quantity for issue	Location
1200	27-01-2016	Baghjul	1 STK	Manual	6	6	0	
1300	27-01-2016	Kædesaml	1 STK	Manual	6	6	0	
1400	27-01-2016	Stænskærm, for	1 STK	Manual	6	6	0	
1450	27-01-2016	Stænskærm, bag	1 STK	Manual	6	6	0	
1500	27-01-2016	Lygte	1 STK	Manual	6	6	0	
1600	27-01-2016	Ringeklokke	1 STK	Manual	6	6	0	
1700	27-01-2016	Bremse	1 STK	Manual	6	6	0	
1800	27-01-2016	Styr	1 STK	Manual	6	6	0	
1850	27-01-2016	Sadel	1 STK	Manual	6	6	0	
1900	27-01-2016	Ramme	1 STK	Manual	6	6	0	
1135	11-18-2015	slange til flad fælg	1	Manual	0	0	6	

Choose Location/Bin Choose Lot Add item Issue materials OK

1.2.8. Using locations and bins

Using locations and bins

✿ You should only read this chapter if you are using locations and bin inventory management.

In NAV it is possible, under "Logistics" menus to determine, that commodities and manufactured items have have assigned a location and a bin. This facility is supported by Naveksa SHOPFLOOR, too. In Naveksa ShopFloor it is possible as well, to assign a temporary location to an item during the manufacturing process, so that the next operation receives information about, where the item in process is placed after completion of the previous operation.

Assignment of a temporary BIN

In the output picture there is a function in the bottom of the picture, where you can assign a location and a BIN:

Stop job

Item No	Starting Date	Starting Time	Prod. res. no.
1000	10-11-2015	12:43:46	140

Production Order No.	Item No	Item description	Output Quantity	Scrap Quantity	Status	End time
101034	1000	Cykel	3	0	Part quantity	13:24:46
101037	1000	Cykel	0	0	Pause	13:24:21
101036	1000	Cykel	7	0	End operation	13:24:08

Prod. res. no. **140**

Output Quantity **3**

Single operation: ☐ Setup ☒ Part quantity ☐ Pause ☐ End operation

All operations: Setup Part quantity Pause all End all operations

Choose Location/Bin **Print pallet label** **Scrap** **OK** **Cancel**

Chose a given production order line and select Location/BIN:

You can now choose the suggested BIN, or another BIN by looking it up in the list of BIN's:

The suggested BIN is the one, that exists default on the production order line, and the one it is necessary to change during the production process, as the temporary BIN rarely will be the final BIN:

Production Order No.	Item No	Item description	Location	Bin
101049	1000	Cykel	SØLV	S-02-0001
101050	1000	Cykel	SØLV	S-02-0002
101027	1000	Cykel	SØLV	S-02-0003

Here you can see that the first line has got another BIN, whereas the other lines do not have got a temporary BIN assigned, yet. At the final completion of the production in question, the item concerned will have a default location assigned, unless this activity is changed.

On the following operation you will then be able to see the temporary BIN of the component:

ORDERS QUEUEING 200 (6) Search Setup 10 / Run 1,119

Start	Multiple Lines	Prod. Order No.	Item No.	Prod.Res.	Description	Location Code	Bin Code
<input type="checkbox"/>	<input type="checkbox"/>	101027	1000		Cykel	SØLV	S-02-0003

Assignment of a new BIN at the Completion of a Production

At the completion of a production, the item has got assigned it's original BIN, and if it does not have to be changed, you can just finish the production in a normal way, without changing the BIN:

Prod. Order No.	Item No.	Prod.Res.	Description	Location Code	Bin Code
101051	1125	160	PLADEHJUL Lot	SØLV	S-01-0001
101052	1125	160	PLADEHJUL Lot	SØLV	S-01-0001
101053	1125	160	PLADEHJUL Lot	SØLV	S-01-0001

If you want to assign a new BIN to the item instead, this will be done through "Location/BIN" and by changing the default BIN:

Production Order No.	Item No	Item description	Location	Bin
101051	1125	PLADEHJUL Lot	SØLV	S-02-0001
101052	1125	PLADEHJUL Lot	SØLV	S-02-0002
101053	1125	PLADEHJUL Lot	SØLV	S-02-0003

At the completion of a Production, this new BIN will be transferred to the Output Journal:

Batch Name: STANDARD

Posting Date	Order No.	Document No.	Item No.	Operation No.	Order Line No.	Type	No.	Location Code	Bin Code
02-06-2015	101004	101004	1125	10	10000	Work Center	100	SØLV	S-01-0001
17-06-2015	101004	101004	1125	10	10000	Machine Ce...	110	SØLV	S-01-0001
03-06-2015	101005	101005	1125	10	10000	Machine Ce...	120	SØLV	S-01-0002
03-06-2015	101006	101006	1125	10	10000	Machine Ce...	120	SØLV	S-01-0002
03-06-2015	101007	101007	1125	10	10000	Machine Ce...	120	SØLV	S-01-0002

Use of location and BIN – Material Issue

Companies working with storage BINs in Navision will have this information available in the overview of the material consumption. The information will be available in the overview of the production components (BOM) as an information for the use of issue from the stock.

Prod. Order Components

Type to filter (F3) Item No. Filter: Released • 101038 • 10000

Item No.	Due Date	Description	Quantity per	Unit of Measur...	Flushing Method	Expected Quantity	Remaining Quantity	Su... Av...	Location Code	Bin Code
1130	08-02-2016	Flad fælg	1	STK	Manual	10	10	No	SØLV	S-01-0002
1135	08-02-2016	slange til flad fælg	2,3756	M	Manual	23,756	23,756	No	SØLV	S-01-0003

It may be necessary to modify the printout of the material request in order to visualize information here.

If marked in the setup of the Naveksa ShopFloor, this variable material consumption is used, information regarding the BIN will be visible, too, when issuing material. In this window it is also possible to issue material from another BIN than the one that is stated by default in the component list.

Production Order Components

Item No.	Due Date	Description	Quantity per	Flushing Method	Requested	Expected Quantity	Quantity for issue	Location	Bin
1130	27-01-2016	Flad fælg	1 STK	Manual	2	2	0	SØLV	S-01-0002
1135	27-01-2016	slange til flad fælg	2,3756 M	Manual	4,752	4,752	0	SØLV	S-01-0003

If the items have been issued from a different BIN than specified, you can go to the location/BIN, and change to the BIN from which the item has been issued:

Production Order Components									
Production Order Components									
Item No.	Due Date	Description	Quantity per	Flushing Method	Requested	Expected Quantity	Quantity for issue	Location	Bin
1100	27-01-2016	Forhjul	1 STK	Manual	5	5	0	SØLV	S-02-0002
1200	27-01-2016	Baghjul	1 STK	Manual	5	5	0	SØLV	S-02-0002

Then select "Issue material" and press OK. The consumption has now been placed in the consumption journal with the selected BINs (the BINs will change in the window, back to default BINs, but it will be the selected ones that are posted).

1.2.9. Using batch/lot and serial number tracking

Using batch/lot and serial number tracking



You should only read this chapter if you are using batch/lot and serial number tracking on consumption and output.

If item tracking via Lot / serial numbers has been chosen in standard NAV for a given item, it will be possible to select them / assign them from the ShopFloor system. It is only possible to assign Lot / serial numbers on the last operation of a routing. The lot/serial number is assigned from the output-window:

Stop job

Item No	Starting Date	Starting Time	Prod. res. no.
1125	12-11-2015	14:43:25	120

Production Order No.	Item No	Item description	Output Quantity	Scrap Quantity	Status	End time
101030	1125	PLADEHJUL Lot	0	0		15:40:13

Prod. res. no. **120**

Output Quantity

Single operation

☐ Setup

☐ Part quantity

☐ Pause

☐ End operation

All operations

Setup

Part quantity

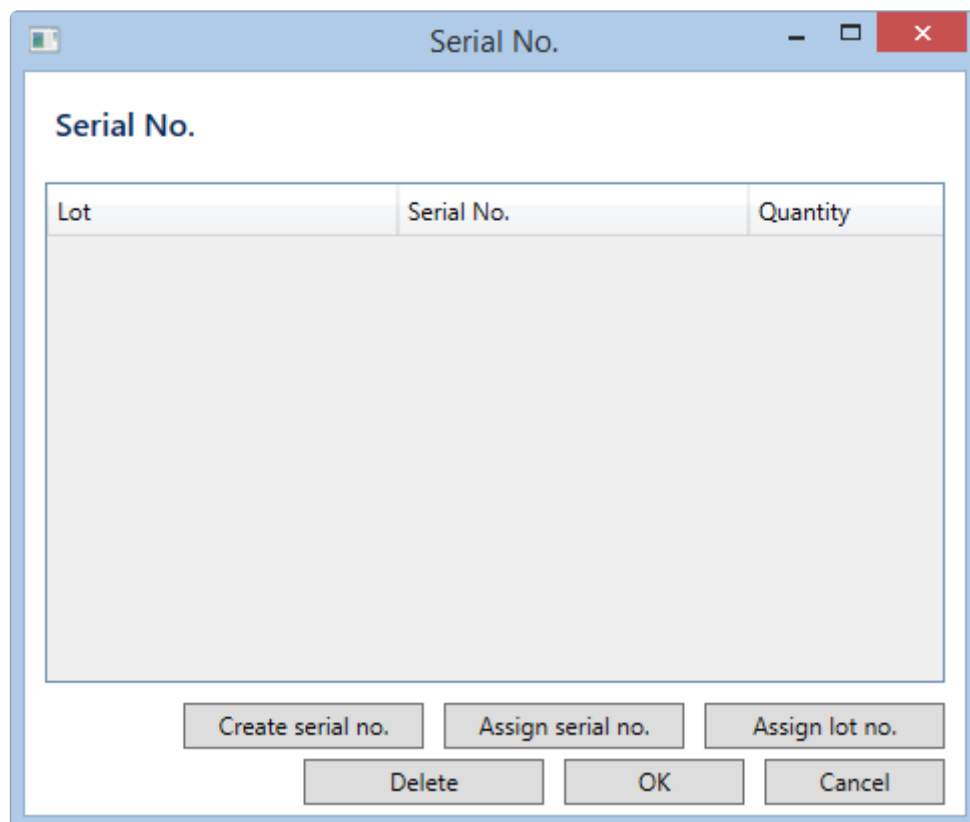
Pause all

End all operations

Assign LOT/Serial No. Choose Location/Bin Print pallet label Scrap OK Cancel

In order to assign Lot/serial numbers to the correct number, you must first select End all operations, or you have to report a certain number as partly completed:

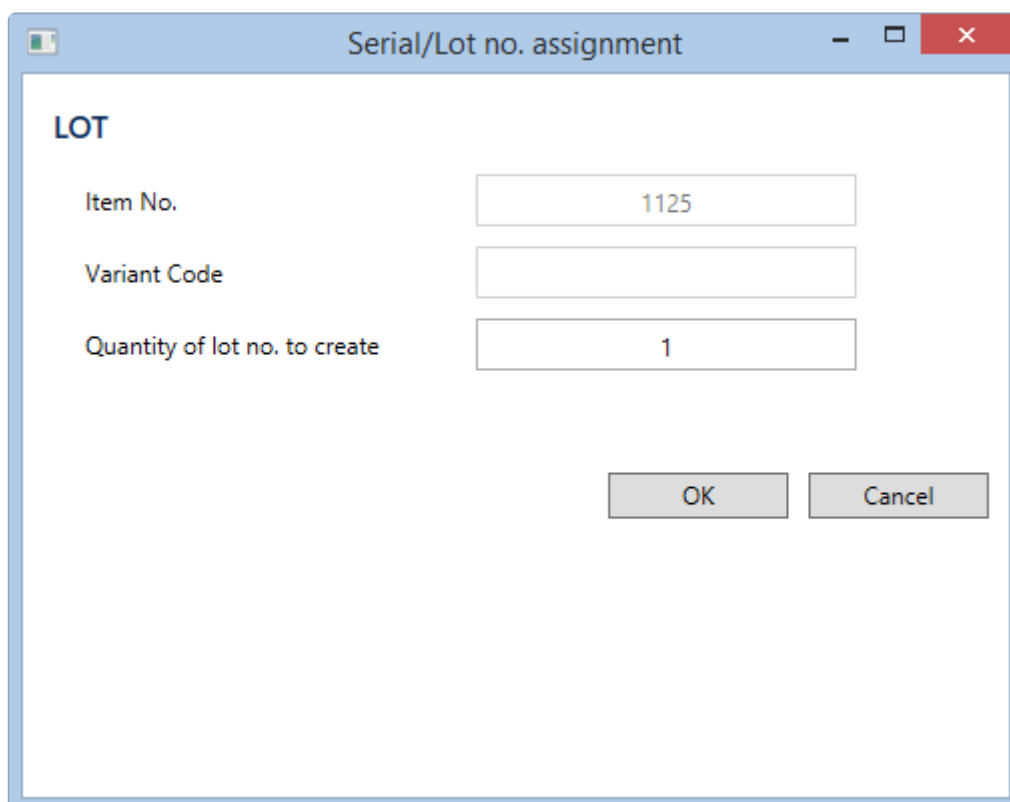
Select Assign Lot/Serial numbers in order to see the following pop up window:



Lot	Serial No.	Quantity
-----	------------	----------

Create serial no. Assign serial no. Assign lot no.
Delete OK Cancel

This item has to have assigned a lot number and therefore select Assign Lot No.



LOT

Item No. 1125

Variant Code

Quantity of lot no. to create 1

OK Cancel

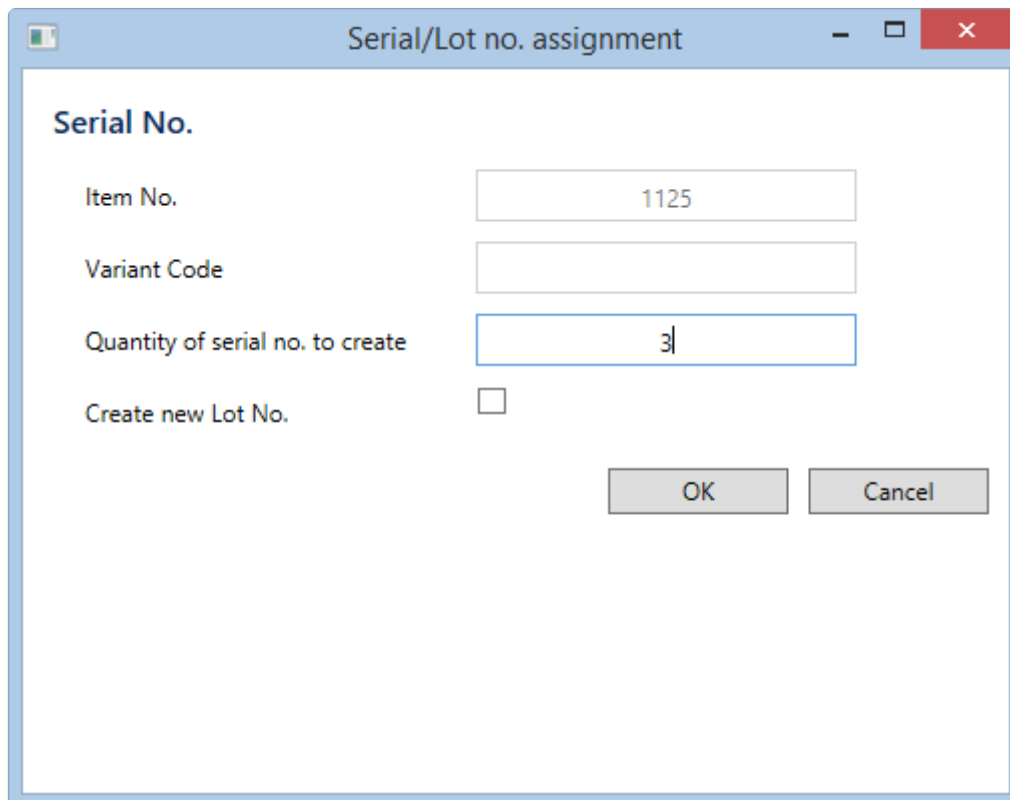
It is only possible to assign one lot number to each production. Therefore the number is set to be 1 by default. Select OK.

Now you can see that this order line, that contains 7 items, has got assigned lot no. LOT0030. Press OK

and once more OK in order to end the production.

Assigning Serial Numbers

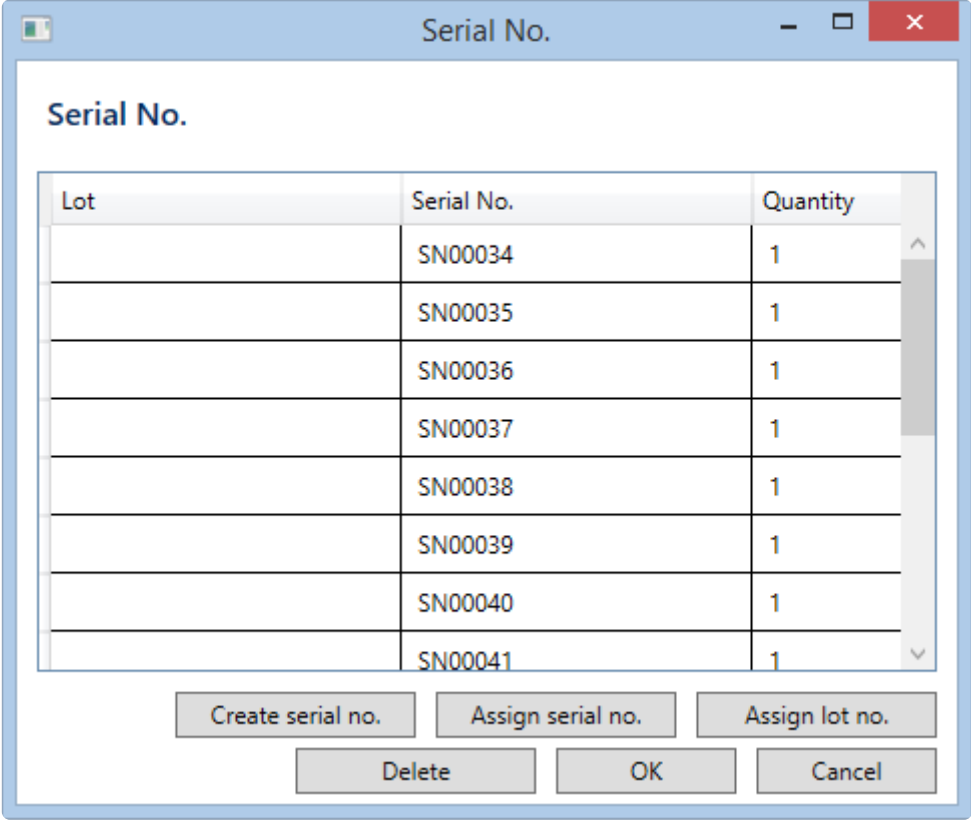
In the same way as the assignment of lot numbers, it is possible to assign serial numbers, in case this has been selected as item tracking. Select Assign Serial Numbers:



The screenshot shows a dialog box titled "Serial/Lot no. assignment". It contains the following fields and controls:

- Serial No.** (Section header)
- Item No.** (Text field) with the value "1125".
- Variant Code** (Text field) which is empty.
- Quantity of serial no. to create** (Text field) with the value "3".
- Create new Lot No.** (Check box) which is unchecked.
- OK** and **Cancel** buttons at the bottom right.

Enter the number of serial numbers that have to be created. Press OK.



The 'Serial No.' dialog box displays a table with three columns: Lot, Serial No., and Quantity. The table contains eight rows of data, with serial numbers ranging from SN00034 to SN00041. Below the table are three buttons: 'Create serial no.', 'Assign serial no.', and 'Assign lot no.'. At the bottom are three buttons: 'Delete', 'OK', and 'Cancel'.

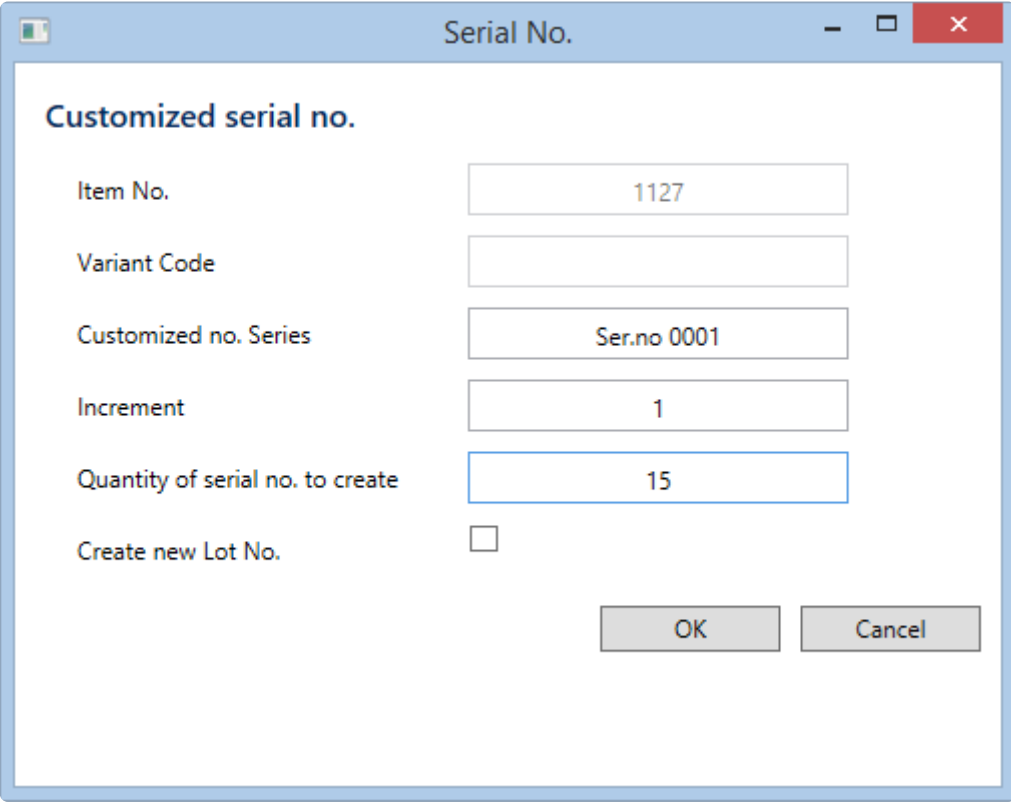
Lot	Serial No.	Quantity
	SN00034	1
	SN00035	1
	SN00036	1
	SN00037	1
	SN00038	1
	SN00039	1
	SN00040	1
	SN00041	1

Create serial no. Assign serial no. Assign lot no.

Delete OK Cancel

Now 3 serial numbers have been created from the number series that has been selected for the item. Press OK and finish the order.

It is also possible to create own serial numbers by selecting Create serial no.



The 'Customized serial no.' dialog box contains several input fields and a checkbox. The fields are labeled: Item No. (1127), Variant Code, Customized no. Series (Ser.no 0001), Increment (1), Quantity of serial no. to create (15), and Create new Lot No. (checkbox). At the bottom are two buttons: 'OK' and 'Cancel'.

Item No. 1127

Variant Code

Customized no. Series Ser.no 0001

Increment 1

Quantity of serial no. to create 15

Create new Lot No. ☐

OK Cancel

Enter the number series, the increase and the number of serial numbers that have to be created and

press OK.

Serial No.

Lot	Serial No.	Quantity
	Ser.no1	1
	Ser.no2	1
	Ser.no3	1
	Ser.no4	1
	Ser.no5	1
	Ser.no6	1
	Ser.no7	1
	Ser.no8	1

Press OK and finish the order.

In case of a special combination of serial numbers, it is possible to correct the text directly in the field "serial numbers".

Assigning Lot and Serial numbers – Material Issue

In order to support tracking of the components, that are a part of the finished product, it is possible to select components from certain lot or serial numbers, when issuing material. If material has to be selected from a certain lot or serial number, the lines will be marked in red, when the window "Material Issue" appears:

Production Order Components

Item No.	Due Date	Description	Quantity per	Flushing Method	Requested	Expected Quantity	Quantity for issue	Location	Bin	Lot no.	Substitution Available
1130	27-01-2016	Flad fælg	1 STK	Manual	0	3	3				No
1135	27-01-2016	slange til flad fælg	2,3756 M	Manual	0	7,127	7,127				No

Mark the line, from which the consumption has to be selected and enter Select Lot – or alternatively enter "Select serial number".

Production Order Components

Item No.	Due Date	Description	Quantity per	Flushing Method	Requested	Expected Quantity	Quantity for issue	Location	Bin	Lot no.	Substitution Availabl
1130	27-01-2016	Flad fælg	1 STK	Manual	0	3	3				No
1135	27-01-2016	slange til flad fælg	2,3756 M	Manual	0	7,127	7,127				No

Choose Location/Bin Choose Lot Add item Issue materials OK

Serial/Lot no. assignment

Lot no.	Assign Serial No	Quantity available	Reserved Quantity	Quantity
LOT0037		30	0	3
LOT0042		54	0	0
LOT0048		92	0	0

OK Cancel

Next to the lot to be chosen from, enter the number:

Serial/Lot no. assignment

Lot no.	Assign Serial No	Quantity available	Reserved Quantity	Quantity
LOT0054		0,111	0	0
LOT0055		76,24	0	7,127

OK Cancel

In case of choosing from serial numbers, enter 1 next to each serial number that is included in the production.

Enter OK, complete the selection of components and then issue material.

Production Order Components

Item No.	Due Date	Description	Quantity per	Flushing Method	Request	Issue	Location	Bin	Lot no.	Substitution Availabl
1130	27-01-2016	Flad fælg	1 STK	Manual	0				LOT0037: 3	No
1135	27-01-2016	slange til flad fælg	2,3756 M	Manual	0				LOT0055: 7,127	No

Choose Location/Bin Add item Issue materials OK

Materials issued

Materials have been issued

OK

The selected lot number and the quantity is displayed next to each single line. If requested, it is possible to enter data directly in the field "Lot number. However it is only recommended for barcode reading.

PLEASE NOTE: If a certain serial number / lot number has been booked for the concerned production,

the field "Booked number" will be filled in, and components have to be selected from this line.

However, it is possible to choose a larger number than the booked number, if necessary.

Various printing of pallet labels, product id tickets can be printed as part of the reporting.

This one is just an example: with item number, batch number, serial number etc.

Receiver 		Dock / Gate 405		Material Handling Code F10-A10-K	
Delivery note or PUS No. (N) 3456789 		Supplier Address 			
		Net Weight (kg) 10	Gross Weight (kg) 14	No. of Boxes 1	
Part No. (P) 90347789 		Kanban No. A123			
Quantity (Q) 160 		Description BOW A-RR SEAT BK BLOCKING			
Supplier DONS No. (V) 123456789 		Package Reference No. (B) OKLT6428 			
		Date D19.09.00		Engineering Change 15.05.00	
Serial (S) 504207 		Batch No. (H) C123456 		Security Sign 	

1.2.10. Using quality assurance and control

Using QA/QC – Quality Assurance and control



You should only read this chapter if you are using quality control together with your other output reporting.

ShopFloor QA is an in-line process reporting tool.

Enter quality control data

ShopFloor QA is fully integrated in the ShopFloor solutions. Dependent on how the workflow settings are configured for the ShopFloor QA classes, the operator will either be reminded about filling in the quality control document at the beginning of the operation, while the operation is processing, or during output, or at finishing the process..

Choosing the function you are lead to a QC screen to be filled with recordings on the produced output quantity. The recordings will be saved at the production order.

NAVEKSA A/S Shop Floor SYSTEM - DEMO, bekdemo - 8.09.00



SHOP WORK LIST 200 - Pakkeri (Packing)



End Week:

5.23 Hours

☒ Show All

Choose default user

ORDERS RUNNING 200 (7)

Search

☒ Show inactive jobs

Setup 180 /

Run 480

Status

Start

292

☐

288

☐

288

☐

214

☐

216

☐

288

☐

290

☐

Quality Assurance

Quality Assurance

QA HEADER | WORK DATE: 11-02-2019

101276 · 10000 · TRACK_QC · 02000

Prod. Order Process Measures

QTY MEASURE CODE	DESCRIPTION	MIN. VALUE	MAX. VALUE	MEAN TOLERANCE
30	Pressure control - 220v/10A	150	200	0
40	Check water tightness OK/not...	0	0	0
30	Pressure control	5	6	0
50	Final inspection according to M...	0	0	0

Quality Measurements

SUBJECT NO.	DATE	CO... OK	30	40	30
		<input type="checkbox"/>			
		<input type="checkbox"/>			

OK Cancel

200

101253

FX-45

NAV Fertig Artikel

FX-45

02000

Packaging

1.2.11. Using Time and Attendance with ShopFloor execution

Using Time and Attendance with ShopFloor execution

* You should only read this chapter if you are time & attendance recording for payroll purposes.

From the ShopFloor operator screen you have the possibility to perform operator time & attendance transactions using the clock in / clock out functions. The transactions are used for payroll purposes.

60	70,0
10	50,0
10	50,0
10	90,0
10	50,0
10	50,0
10	110,0

>

Total Time	Customer

ORDER NOTE

POST MAT.

PALLET LABEL

CLOCK IN

CLOCK OUT

QA

Operators can see their detail attendance entries.

TimeRegister

— □ ×

Clock in/out - Wednesday 14:47

Time stamps

Prod. res. no.	Full Name	Week day	Start Date	Start Time	End Time	Absence Code Name	Absence Description	Job
110	Jesper Ræbild	Monday	09-09-2019	00:00:00	09:19:05			
110	Jesper Ræbild	Monday	09-09-2019	09:19:05	09:19:33	ILL	Sick leave	
110	Jesper Ræbild	Monday	09-09-2019	09:19:33	00:00:00			110/101275

< >

OK

[How all this works in detail and how you get data off the system for payroll processing, please click here to read the Time & Attendance manual](#)