

# NAVEKSA

## CADConnect

- Converting data directly from CAD-drawing to BC
- Calculating sales offers without having items created in BC
- Eliminating risk of typing errors

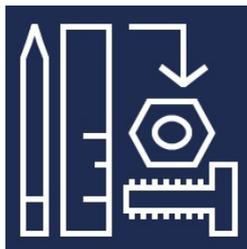
### Why CadConnect

The primary objective is to import a construction bill of materials file, created from a CAD system, into the CadConnect solution. Here, the production engineer begins their work by modifying the construction data into a format they deem most efficient for production.

A secondary objective is to take an existing BC product and modify it to create a new, similar product using a same-as-except approach.

Furthermore, CadConnect can be utilized to create new products from scratch by manually adding information.

Regardless of the source material, CadConnect enables working with the entire product on a single screen, which overcomes the standard BC method of processing one level at a time with limited visibility into the ongoing operations.





## CADConnect - Index

### Contents

CADConnect – Installation and First time setup .....	3
CADConnect – How to use.....	4
Import of data .....	4
Import file.....	6
BOMS and Routings.....	8
Modelling a CAD-BOM .....	10
Insert new lines .....	10
Delete lines.....	10
Manage .....	10
Calculating cost without having the items created in BC.....	11
Simulation .....	11
Copying an existing CAD-BOM in BC.....	14
CADConnect – Extra benefits and Functions .....	15
Attributes .....	15
Advanced templates.....	15
CADConnect- License renewal.....	16
CADConnect – Version update .....	17





## CADConnect – Installation and First time setup

1. Order a license key to be able to run app for production purposes by writing to Naveksa at [support@naveksa.com](mailto:support@naveksa.com)
2. If for a BC Cloud download the app from Microsoft AppSource.
3. You can get it here clicking the Free trial button:  
<https://appssource.microsoft.com/en-us/product/dynamics-365-business-central/PUBID.naveksaas1606382180343%7CAID.ccn365%7CPAPPID.59fdc2c3-c05c-44b7-a0f9-d55b0bbbb817?exp=ubp8>
4. If for an On-premise go to our Help center and download the app.
  - a. <https://www.dropbox.com/home/NAVEKSA%20TEAM/Teknik/Software/Releases/2023/CadConnect>
  - b. Installation is done by the common PowerShell commands exactly like any other BC App.  
  
Nb. Please notice you must create yourself as a user, or sign in to our Help desk before you can download.
5. Insert the license key in the CadConnect setup.
6. Run the Setup wizard or go straight to the CadConnect setup.
  - a. Here you can find the detailed explanation of each field:  
<https://www.manula.com/manuals/naveksa/installation-and-setupguide/1/en/topic/cadconnect>
  - b. Please pay attention to setup the following fields correctly:  
**CadConnect numbers** – Create a BC number series for that.  
Select your **import method** – excel or xml.  
Select the correct Excel import structure or in case of xml, the correct xmlimport  
Select the correct BOM type, creation.  
Please pay attention to the wanted default setup of the **Item creation templates**-  
enditems, fabricated items, purchased items, assembled items or use template-setup.
7. You are ready to go and import your first construction  
Use the detailed manual to find out how it works.

<https://www.manula.com/manuals/naveksa/cadconnect/1/en/topic/before>







C0000484

Process **Import** Copy Update Export Automate ▾ Fewer options

Import Excel-file...

Start from top filling in information

CadConnect Excel data import

**Options**

Import from

Workbook File Name .....  ...

Worksheet Name .....  ...

First Data row .....

First Data row = Header Item

**Column Definition**

Specify which columns contains which data

**Item Fields:**

Level .....	<input type="text" value="A"/>
Item No. ....	<input type="text" value="K"/>
No. 2 .....	<input type="text"/>
Description .....	<input type="text" value="J"/>
Description 2 .....	<input type="text"/>
Additional Text .....	<input type="text" value="M"/>
Quantity .....	<input type="text" value="E"/>
Unit of Measure .....	<input type="text" value="D"/>
Gross Weight .....	<input type="text"/>
Net Weight .....	<input type="text"/>
Component No. ....	<input type="text"/>
Unit Cost Price .....	<input type="text" value="P"/>
Lot Size .....	<input type="text"/>
Scrap % .....	<input type="text"/>

Schedule... OK Cancel

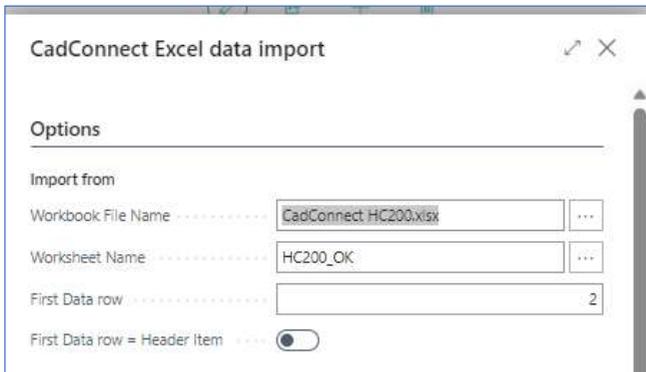
And select





## Import file

Press the 3 spots in the filed Work book file name and browse for the file you want to import



Next to fill in is the information for Item Fields (in which column are my data placed in the spreadsheet). Example: Quantity is placed in column E

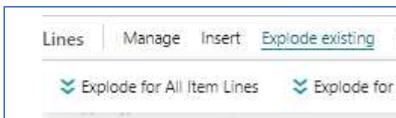
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
Level				Qty.per	Revision	Pos.			Description	No		Support text	U/M	Kostpris	Material	Colour	Model	Year
0				1	1	3			Hydraulic cylindr	HC200		For Series 200	PCS	556	Stainless	Red		2023
1				2	1	1			Cylinder barrel	AC200		For Series 200	PCS	264				
2				1	1	1			Cylinder head	BC200		For Series 200	PCS	125				
3				1	1	2			Sealing	CC200		For Series 200	PCS	0,5				
1				1	1	2			Piston	AC300		For Series 200	PCS	58				
2				5	1	2			Bolt	BC300		For Series 200	PCS	2				
1				0,5	1	1			Steel	AC400		For Series 200	LBS	88				



Press OK and the data will be found in the field Lines

Type	Level	No.	Description	Item Type	Item Relationship	Version	Ver. Start	BOM Variant	Route Link	Template	Routing No.	Vend. No.	Quantity	UoM Code	Config. Temp.	Setup Time	Run Time	Wpn Time
Item	0	HC200	Hydraulic cylinder	Production	Prod. Order					HC200			1	PCS	VARE000002			
Item	1	AC200	Cylinder barrel	Production	Prod. Order					AC200			2	PCS	VARE000002			
Item	2	BC200	Cylinder head	Production	Prod. Order					BC200			1	PCS	VARE000002			
Item	3	CC200	Sealing	Purchase	Purchase					CC200	50000		1	PCS	VARE000007			
Item	1	AC300	Piston	Production	Prod. Order					AC300			1	PCS	VARE000002			
Item	2	BC300	Bolt	Purchase	Purchase								5	PCS	VARE000007			
Item	1	AC400	Steel	Purchase	Purchase							50000	0.5	LBS	VARE000007			

By pressing **Explode existing** and afterwards **Explode for All Item lines** the route is shown in the table

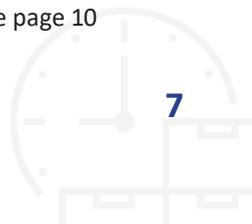


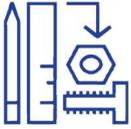
Type	Level	No.	Description	Item Type	Item Relationship	Version	Ver. Start	BOM Variant	Route Link	Template	Routing No.	Vend. No.	Quantity	UoM Code	Config. Temp.	Setup Time	Run Time	Wpn Time	
Route	0	MSC_TEST	Hydraulic cylinder		Prod. Order														
Work Ce...	1	100	Final assembly		Prod. Order														45
Work Ce...	1	200	Final Quality Control		Prod. Order														10
Item	0	HC200	Hydraulic cylinder	Production	Prod. Order					HC200			1	PCS	VARE000002				
Route	1	HC200	Hydraulic cylinder for series 200		Prod. Order														
Work C...	2	100	Final assembly		Prod. Order														45
Work C...	2	200	Final Quality Control		Prod. Order														10
Item	1	AC200	Cylinder barrel for series 200	Production	Prod. Order								2	PCS	VARE000002				
Route	2	AC200	Cylinder barrel for series 200		Prod. Order														
Work...	3	400	Drege komplet		Prod. Order											10			25
Work...	3	200	Freistügge		Prod. Order											5			30
Item	2	BC200	Cylinder head for series 200	Production	Prod. Order								1	PCS	VARE000002				
Route	3	BC200	Cylinder head for component ...		Prod. Order														
Wo...	4	805	Subcontracting		Prod. Order														
Item	3	CC200	Sealing for series 200	Purchase	Purchase							50000	1	PCS	VARE000002				
Ro...	4	CC200	Sealing		Prod. Order														
W...	5	805	Subcontracting		Prod. Order														
Item	1	AC300	Piston for series 200	Production	Prod. Order								1	STK	VARE000002				

In the column **Item types** you can choose between **Production order**, **Purchase** and **Assembly**. Be aware that **Purchase** can be used for subcontractors where you deliver all (item numbers, BOMs and Routes).

If satisfied with the CADConnect item you can change status from **New** to **Certified** and you will get a question if **Items**, **BOMs** and **Routes** shall be created in **BC**.

If something needs to be changed you can use the **Modelling** function- see page 10





## BOMS and Routings

Once you have finished working with the CADConnect item and everything is satisfying, it is possible to automatically create Items, BOMS and Routings by pressing Update Items/BOM/Routing

← CadConnect Item

C0000484

Process Import Copy Update

↗ Create Items/BOM/Routing

! Status must be equal to 'Certified' in CadConnect Header:  
No.=C0000484. Current value is 'New'.

[Copy details](#)

Was this information helpful?  Yes  No

Status .....

Status must be changed to Certified before proceeding.

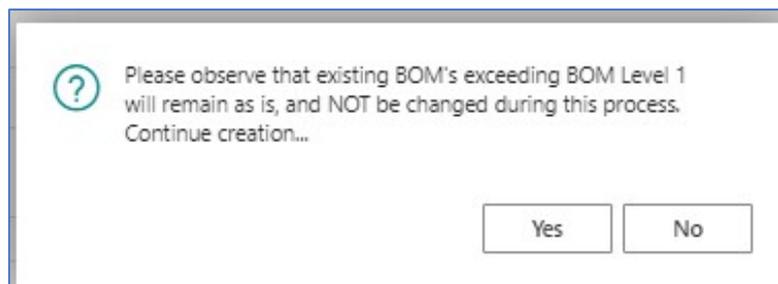
If set up time is not filled in, you will be prompted if you want to continue Yes or No

You are also asked if you want to update calculations (cost)

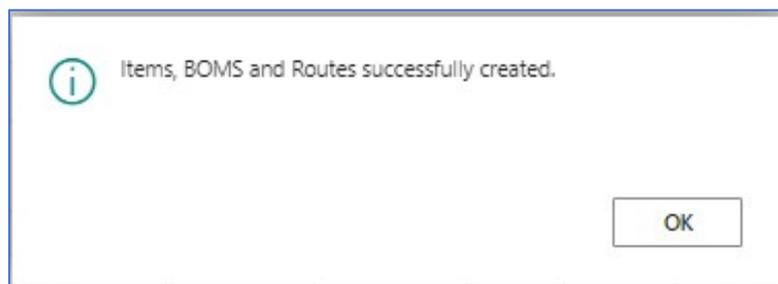
? Update calculation



Items, BOM and Routing are now created in BC



Press Ok



Routing No and Production BOM No is filled in automatically after creation.

Status .....	Certified	▼
Config. Template .....	VARE000001	▼
Template Routing No. ....	HC200	▼
Routing No. ....	MSC_TEST	▼ ...
Production BOM No. ....	MSC_TEST	▼ ...



## CADConnect- How to use

### Modelling a CAD-BOM

Lines   Manage   Insert   Explode existing   <u>Modelling</u>   Fewer options							
◀ Indent Line (Out) - Remove BOM level		▶ Indent Line (In) - Create BOM level		⬆ Move line up		⬇ Move line down	
▼	Route	:	0	MSC_TEST	Hydraulic cylinder		Prod. Order
	Work Ce...	:	1	100	Final assembly		Prod. Order
	Work Ce...	:	1	200	Final Quality Control		Prod. Order
→	▼	Item	:	0	HC200	Hydraulic cylinder	Production Prod. Order

For modelling there is a range of possibilities for optimizing your CADConnect item

#### Insert new lines

In the field Insert there is a various list of possibilities

Lines   Manage   <u>Insert</u>   Explode existing   Modelling   Fewer options											
📄	Insert Item - Enter / Copy from BC	🔧	Insert operation	🔧	Insert 1st Main operation	🔧	Insert routing / Copy from BC	🔧	Insert Main routing / Copy from BC	📄	Insert Surface

#### Delete lines

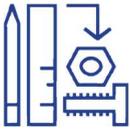
If you want to delete lines, press Manage and you can either delete one or more lines

Lines   <u>Manage</u>   Insert   Explode existing   Modelling   Fewer options																	
🗑	Renumber lines	🗑	Delete Line	🗑	Delete Multiple Lines	💬	Comments	📍	Where-Used	🏗	Current Structure	🔗	Item Variants	📏	Dimensions	🔗	Item Links

#### Manage

In the field Manage there is a list of options, ie Item Links where you can add links to the item. For further information go to the manual

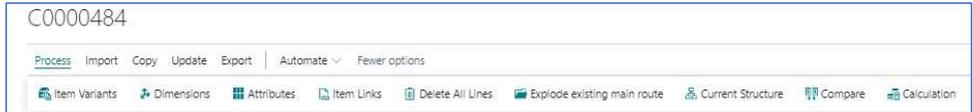
<https://www.manula.com/manuals/naveksa/cadconnect>



## CADConnect- How to use

### Calculating cost without having the items created in BC

Once you have created an item in CADConnect you can easily calculate the cost by pressing Process and then Calculation



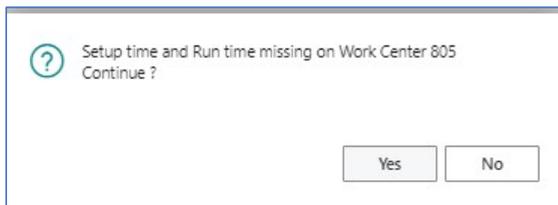
### Simulation

Below is displayed the cost that is found in BC. If prices for materials increase, it can be very useful to make a simulation for the cost.

Before simulation you need to perform a calculation by pressing Process and afterwards Calculation



If prices are missing in BC, ie Set up time, you will be prompted and can put in the missing if important





No prices filled in the Fields Simulated in the right column

Load report from C0000484

Process Import Copy Update Export Automate Fever options

**General** Show less

No.	C000484	Status	Certified	User ID	PREMIUM
Item No.	MSC_TEST	Config. Template	VARE00001	Last Date Modified	21-08-2023
Description	Hydraulic cylinder	Template Routing No.	HC200	Total Cost	2,970,00
Description 2	Created for test	Routing No.	MSC_TEST	Material Cost	2,030,00
Main BOM Version		Production BOM No.	MSC_TEST	Labour Cost	940,00
Main BOM Version Start		Lot Size	1	Simulated Total Cost	0,00
Unit of Measure Code	PCS	Gross Weight		Simulated Material Cost	0,00
Item Replenishment System	Prod Order	Net Weight		Simulated Labour Cost	0,00

Lines | Manage | Import | Export | Printing | Invoice options

Item	Type	Material No.	Quantity	Unit of Measure	Part Name	Part Time	Part Price	Material Price	Material Cost	Labour Cost	Simulated Unit Cost	Simulated Material Cost	Simulated Labour Cost
MSC_TEST	Root							0,00	0,00	0,00	470,00	470,00	0,00
MSC_TEST	Work Ctr		1	PCS	WORE00002	10		2,500,00	2,500,00	2,080,00	470,00	2,500,00	0,00

Simulated cost are now filled in

Load report from C0000484

Process Import Copy Update Export Automate Fever options

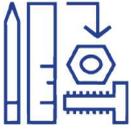
**General** Show less

No.	C000484	Status	Certified	User ID	PREMIUM
Item No.	MSC_TEST	Config. Template	VARE00001	Last Date Modified	21-08-2023
Description	Hydraulic cylinder	Template Routing No.	HC200	Total Cost	2,970,00
Description 2	Created for test	Routing No.	MSC_TEST	Material Cost	2,030,00
Main BOM Version		Production BOM No.	MSC_TEST	Labour Cost	940,00
Main BOM Version Start		Lot Size	1	Simulated Total Cost	2,970,00
Unit of Measure Code	PCS	Gross Weight		Simulated Material Cost	2,030,00
Item Replenishment System	Prod Order	Net Weight		Simulated Labour Cost	940,00

Now you can change the prices in the field Simulated Unit cost

Simulated Unit Cost	Simulated Unit Cost
0,00	0,00
10,00	10,00
2,00	2,00
2.500,00	3.000,00

Press Process and afterwards Simulation



CadConnect Item

C0000484

Process Import Copy Update Export Automate Fewer options

Item Variants Dimensions Attributes Item Links Delete All Lines Explode existing main route Current Structure Compare Calculation Simulation

? Please note that simulation requires an initial calculation has been run. Continue...

Yes No

If the system find something missing it will prompt you and you can correct it or ignore by pressing  
Yes

? Setup time and Run time missing on Work Center 805 Continue ?

Yes No





## CADConnect – How to use

### Copying an existing CAD-BOM in BC

If you want to copy an existing CADConnect item, you press Copy and afterwards Copy from existing.

CadConnect Item

C0000484

Process: Import Copy

Copy from existing...

You can select how much you want to copy and from which item number from the total list

### Copy Existing

Copy Main Route

Copy Main Prod.BOM

Copy all Routes

Copy all Prod.BOMs

Copy Assembly BOM

**Filter: Item**

× No.

+ Filter...

Filter totals by:

+ Filter...

No. ↑	Description	Base Unit Measure
1	POST01	PCS
10	DIAG03	PCS
1000	Vare 1000 - Meget lang beskrivelse	STK
10000101	Piezo - 2.015x2x2 - 100	PCS
10000116	Encoder-1-5-0	PCS

+ New Select from full list



## CADConnect – Extra benefits and Functions

### Attributes

General Idea is to be able to extend items created through CadConnect with values for different existing item Attributes.

### Advanced templates

If you are using standard templates, you can setup 4 different templates. One for each of the following item types:

- End-item (CadConnect header item)
- Produced item (CadConnect line item, for items with a prod.BOM)
- Purchased items (CadConnect line item, for items without a BOM, that is lowest level items)
- Assembly items (CadConnect line item, for items with an assembly BOM)

If this seems insufficient, you have the possibility to select the advance templates function in CadConnect Setup.

**For more information, please visit the manuals at [www.Naveksa.com](http://www.Naveksa.com)**



## CADConnect- License renewal.

1. Order a license key to be able to run app for production purposes by writing to Naveksa at [support@naveksa.com](mailto:support@naveksa.com)
2. Go to BC and open the CadConnect Setup.
3. Insert the new license key at the top of the page.
4. You are ready to go.

## CADConnect – Version update.

1. If for a BC Cloud the update follows the normal Rules for BC Cloud installation. If you need to download the app from Microsoft AppSource, you can get it here clicking the Free trial button:

<https://appsource.microsoft.com/en-us/product/dynamics-365-businesscentral/PUBID.naveksaas1606382180343%7CAID.ccn365%7CPAPPID.59fd2c3-c05c-44b7-a0f9-d55b0bbbb817?exp=ubp8>

2. If for an On-premise go to our Help center and download the app.
  - a. <https://www.dropbox.com/home/NAVEKSA%20TEAM/Teknik/Software/Releases/2023/CadConnect>
  - b. Installation and update is done by the common PowerShell commands exactly like any other BC App.

Nb. Please notice you must create yourself as a user, or sign into our Help desk before you can download.

3. Go to the CadConnect setup display and check for new set up parameters if any mentioned in the release notes.
4. You are ready to go.