

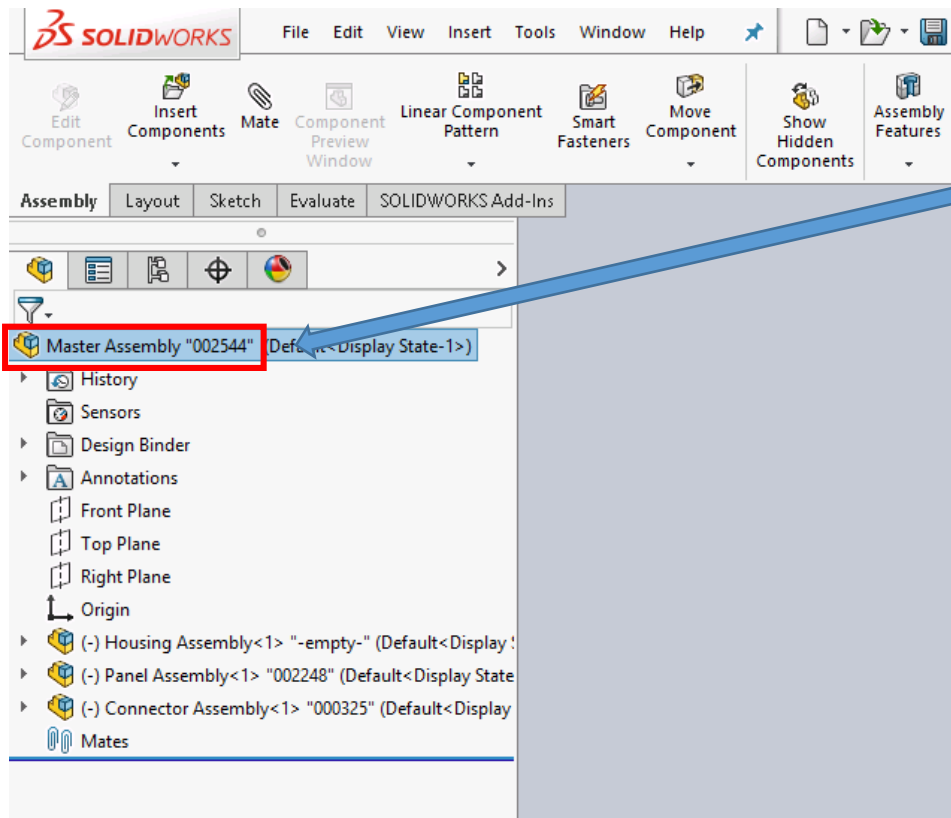
# CAD-ERP Integration



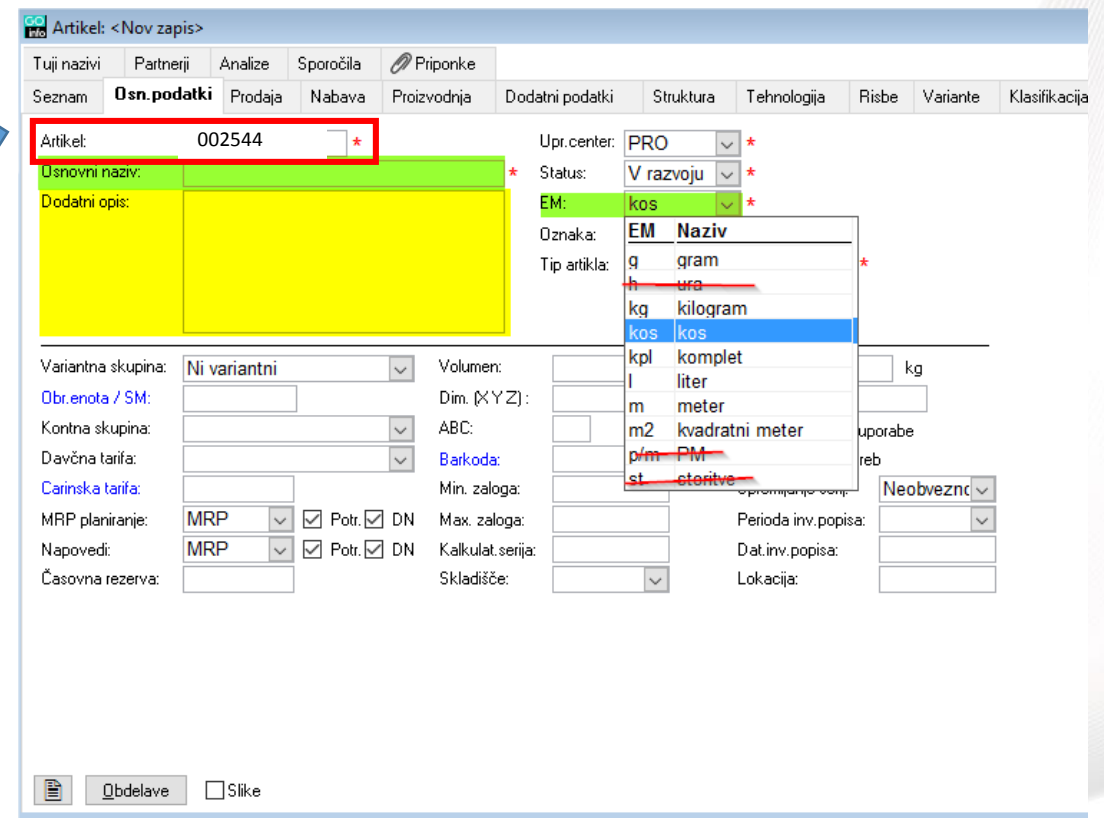
Member of

COMPUTER CONTROLS 

# CAD - SolidWorks



# ERP - GoSoft

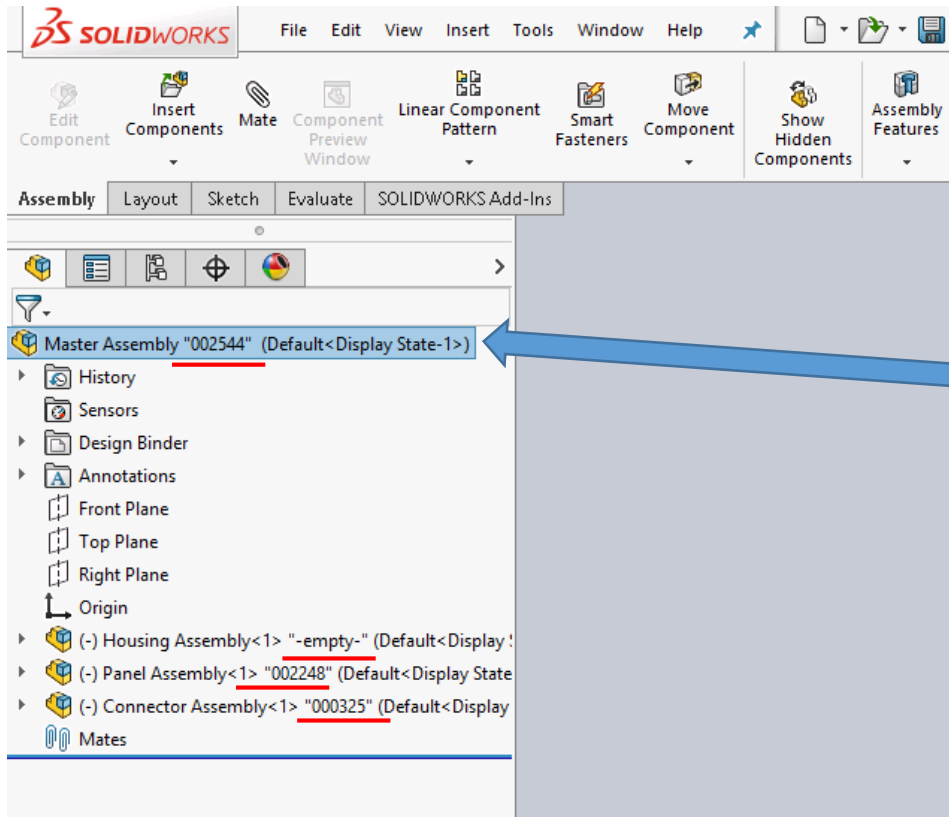


CAD-ERP  
interface

## Goal of the CAD-ERP interface:

- Reduce the need of the engineers to go out of the CAD software
- Automatization of the processes in ERP sustavu
- Dana exchange between softwares (no need to skip to other app to look for data)

# CAD – ERP interface



App usage customized according to the processes inside the company phase-by-phase (check if all criteria has been met to go into next phase)

PIMS CAD-ERP Interface preview

1. Synchronize Assembly/Part Ident  
2. Send BOM  
3. Technology parameters  
4. Export PDF/STEP

SolidWorks data	Value
Naziv	Master Assembly
Ident	002544
Masa	0.45
Jedinica mjere	kg
Cijena (KM)	15

SW Data  
BOM data  
Technology data  
Export

Print out of the data for Ident/CAD componentu selected in SolidWorks

Display og the data from CAD and/or ERP

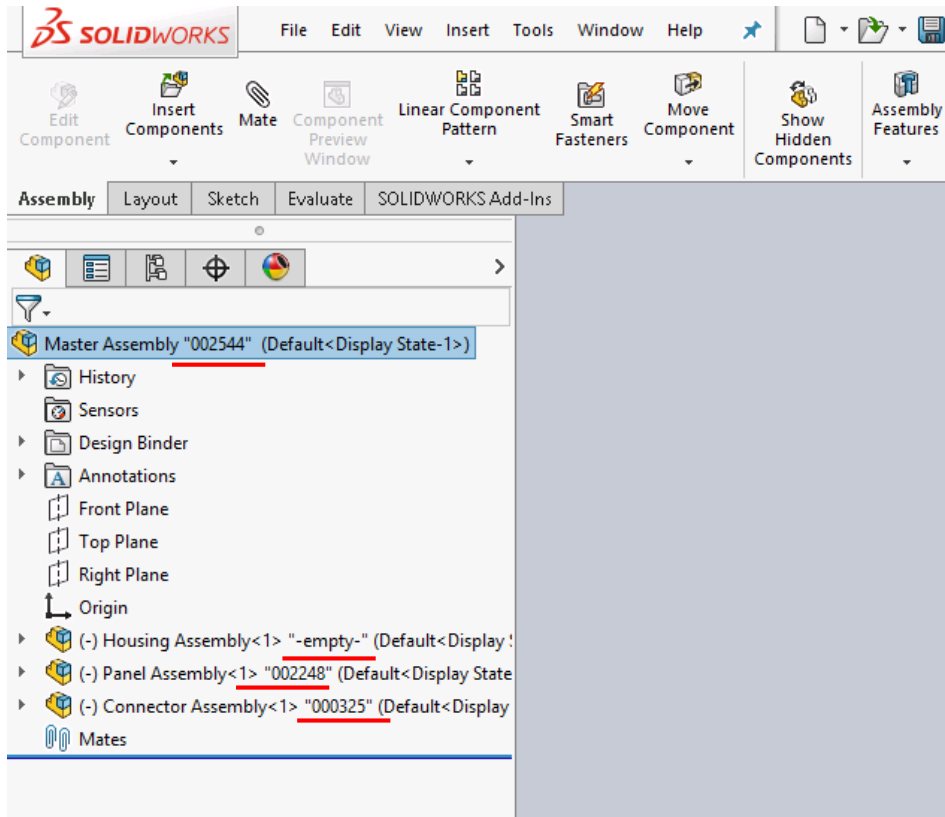
The look can be customized according to the customer's needs and wishes

## CAD – ERP interface:

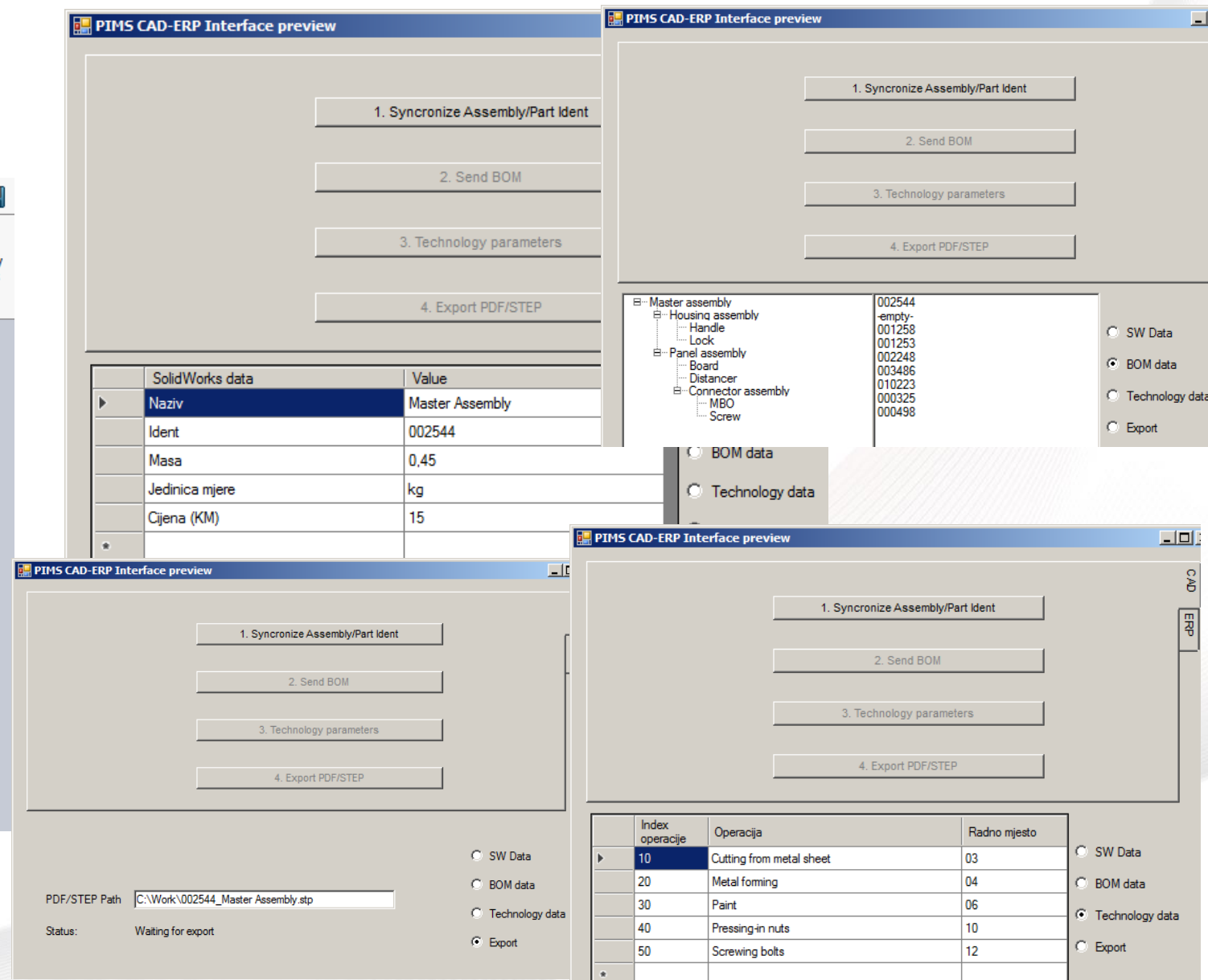
### 1. Engineering phase-by-phase

- CAD design
- Selection of the technology
- Manufacturing

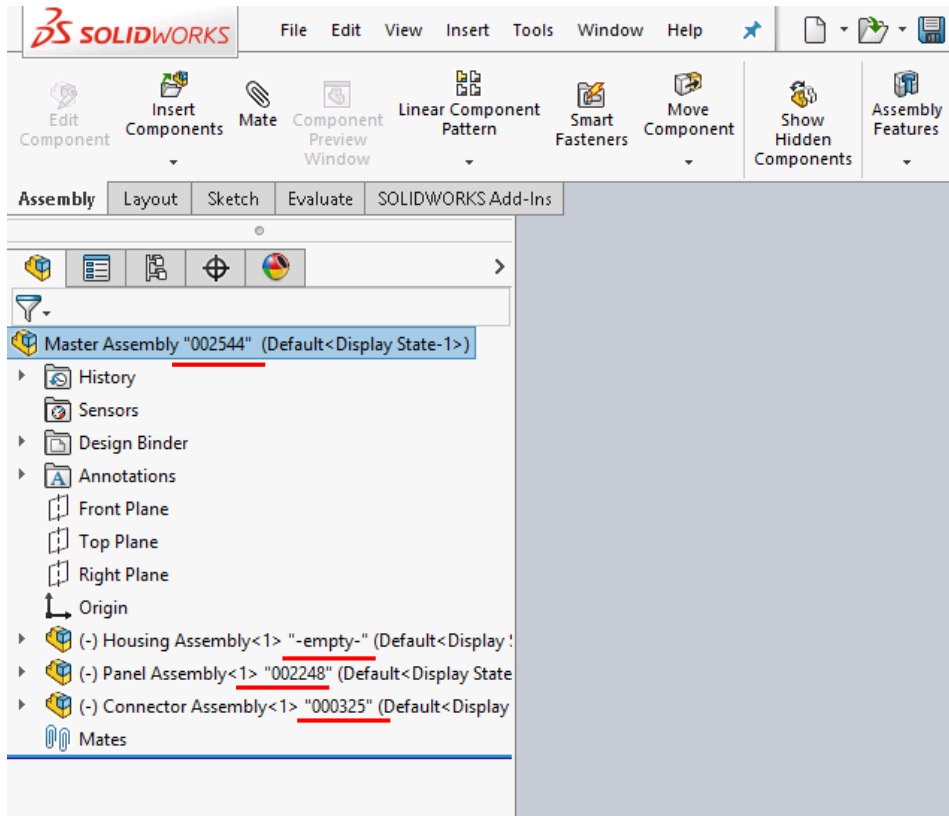
# CAD – ERP interface



CAD – ERP interface:  
2. Dana exchange between CAD and ERP on current Part/SubAssembly/Assembly



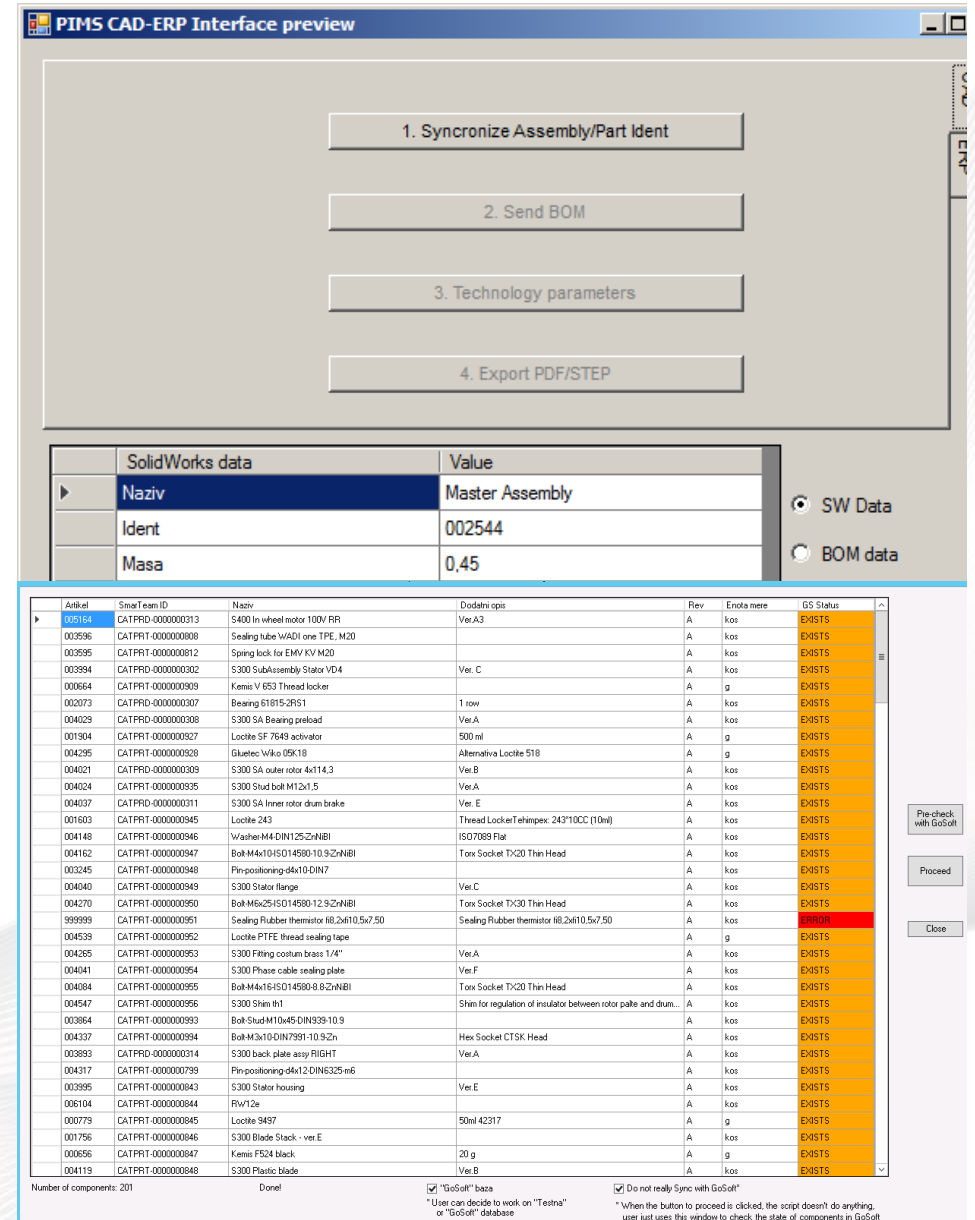
# CAD – ERP interface



## CAD – ERP interface:

### 3. Adding new data into CAD

- Fetching new Indents from GoSoft (for part or complete assembly)
- Dana exchange for existing parts(feedback from GoSoft)
- Check of the complet structure if it is ready for next phase



# CAD – ERP interface

- Required information:
  - When to do sinchronization (in which design phase)
  - Checks before sync that can stop syncing if certain conditions are not met? (for example approval inside SW)
  - Which data is needed from SW to perform syncing?
  - Which data is needed from GS to perform syncing (required fileds for opening Indent?)

**PIMS CAD-ERP Interface preview**

1. Synchronize Assembly/Part Ident

2. Send BOM

3. Technology parameters

4. Export PDF/STEP

SolidWorks data	Value
Naziv	Master Assembly
Ident	002544
Masa	0,45

SW Data  
 BOM data

Artikel	SmaTeam ID	Naziv	Dodajni opis	Rev	Enots mere	GS Status
035164	CATFRD-0000000313	S400 In wheel motor 100V/RR	Ver.A3	A	kos	EXIST
003596	CATFRD-0000000808	Sealing tube WAD1 one TPE_M20		A	kos	EXIST
003595	CATFRD-0000000812	Spring lock for EMV KV M20		A	kos	EXIST
003994	CATFRD-0000000302	S300 SubAssembly Stator VD4	Ver. C	A	kos	EXIST
000664	CATFRD-0000000909	Kemis V 653 Thread locker		A	g	EXIST
002073	CATFRD-0000000307	Bearing 61815-2RS1	1 row	A	kos	EXIST
004029	CATFRD-0000000308	S300 SA Bearing preload	Ver.A	A	kos	EXIST
001904	CATFRD-0000000927	Loctite SF 7649 activator		A	g	EXIST
004295	CATFRD-0000000928	Gluelec Wiko 05K18	Alternativa Loctite 518	A	g	EXIST
004021	CATFRD-0000000909	S300 SA outer rotor 4x114.3	Ver.B	A	kos	EXIST
004024	CATFRD-0000000925	S300 Std bolt M12x1.5	Ver.A	A	kos	EXIST
004037	CATFRD-0000000911	S300 SA Inner rotor drum brake	Ver. E	A	kos	EXIST
001503	CATFRD-0000000945	Loctite 243	Thread Locketehinex: 243*10CC (10ml)	A	kos	EXIST
004148	CATFRD-0000000946	Washer M4 DIN1125-ZnNBI	ISO 7089 Flat	A	kos	EXIST
004152	CATFRD-0000000947	Bolt M4x10-ISO14500-10-9-ZnNBI	Tox Socket Tx20 Thin Head	A	kos	EXIST
003245	CATFRD-0000000940	Pin-positioning d4x10-DIN7		A	kos	EXIST
004040	CATFRD-0000000949	S300 Stator flange	Ver.C	A	kos	EXIST
004270	CATFRD-0000000950	Bolt M6x25-ISO14580-12-9-ZnNBI	Tox Socket Tx30 Thin Head	A	kos	EXIST
999999	CATFRD-0000000951	Sealing Rubber thermistor R8.2x10.5x7.50	Sealing Rubber thermistor R8.2x10.5x7.50	A	kos	ERROR
004539	CATFRD-0000000952	Loctite PTFE thread sealing tape		A	g	EXIST
004265	CATFRD-0000000953	S300 Fitting coolant brass 1/4"	Ver.A	A	kos	EXIST
004041	CATFRD-0000000954	S300 Phase cable sealing plate	Ver.F	A	kos	EXIST
004084	CATFRD-0000000955	Bolt M4x16-ISO14580-8-9-ZnNBI	Tox Socket Tx20 Thin Head	A	kos	EXIST
004547	CATFRD-0000000956	S300 Sham iht	Shm for regulation of insulator between rotor pale and drum...	A	kos	EXIST
003864	CATFRD-0000000993	Bolt Stud M10x45-DIN939-10-9		A	kos	EXIST
004337	CATFRD-0000000994	Bolt M3x10-DIN7991-10-9-Zn	Hex Socket CTSK Head	A	kos	EXIST
003893	CATFRD-0000000914	S300 back plate assy RIGHT	Ver.A	A	kos	EXIST
004317	CATFRD-0000000799	Pin-positioning d4x12-DIN5325 m6		A	kos	EXIST
003995	CATFRD-0000000843	S300 Stator housing	Ver.E	A	kos	EXIST
006104	CATFRD-0000000844	Rlv12e		A	kos	EXIST
000779	CATFRD-0000000845	Loctite 9497	50ml 42317	A	g	EXIST
001756	CATFRD-0000000846	S300 Blade Stack - ver E		A	kos	EXIST
000656	CATFRD-0000000847	Kemis FS24 black	20 g	A	g	EXIST
004119	CATFRD-0000000848	S300 Plastic Blade	Ver.B	A	kos	EXIST

Number of components: 201      Done!

"GoSoft" baza  
\* User can decide to work on "Testina" or "GoSoft" database

Do not really Sync with GoSoft!  
\* When this button is proceed is clicked, the script doesn't do anything, user just uses this window to check the state of components in GoSoft

Pre-check with GoSoft

Proceed

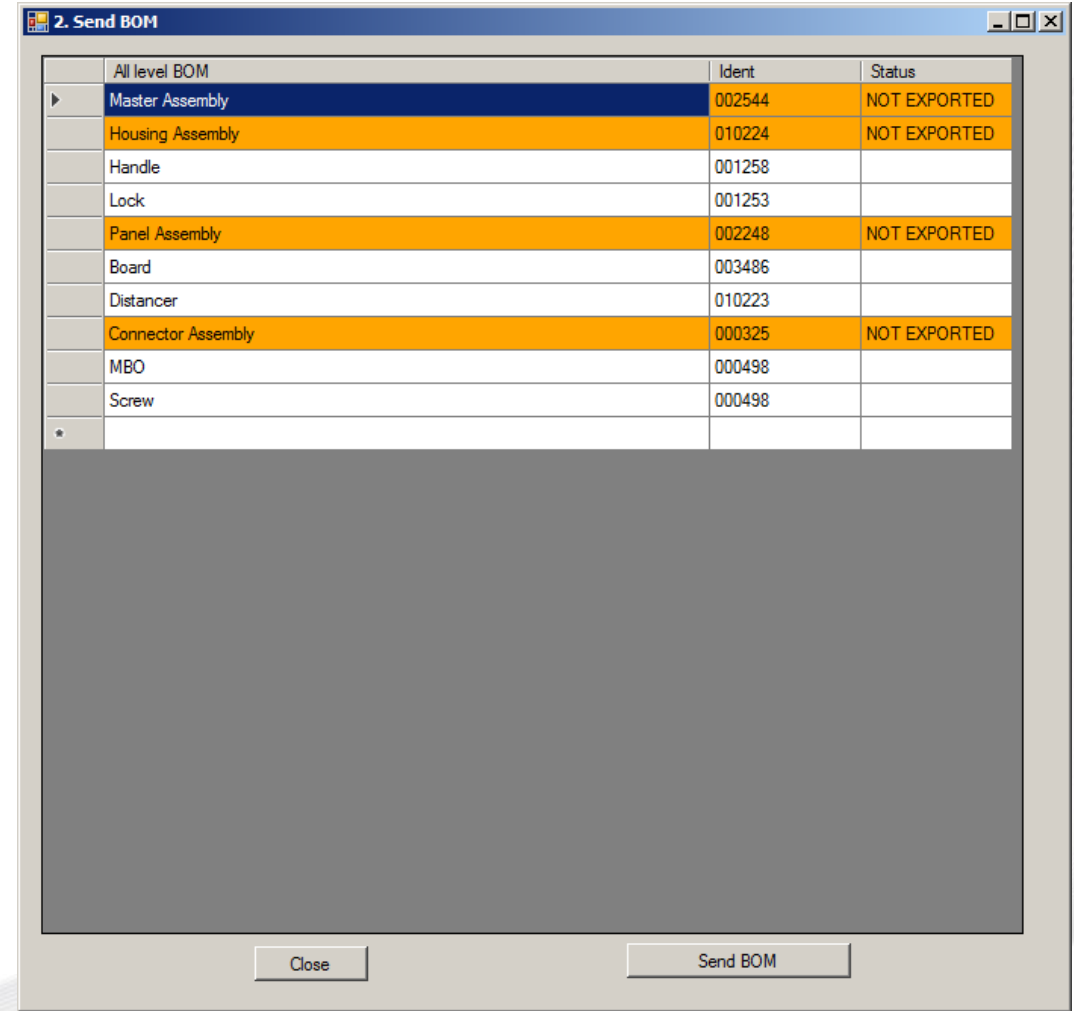
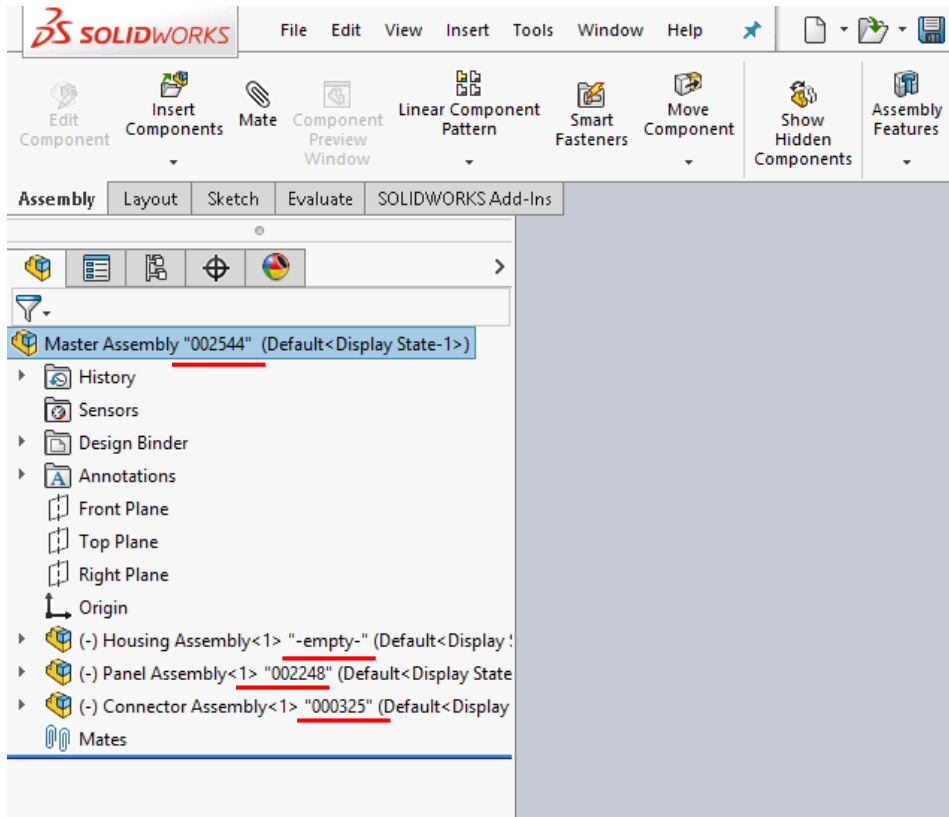
Close

## CAD – ERP interface:

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- Check of the complet structure if it is ready for next phase

# CAD – ERP interface



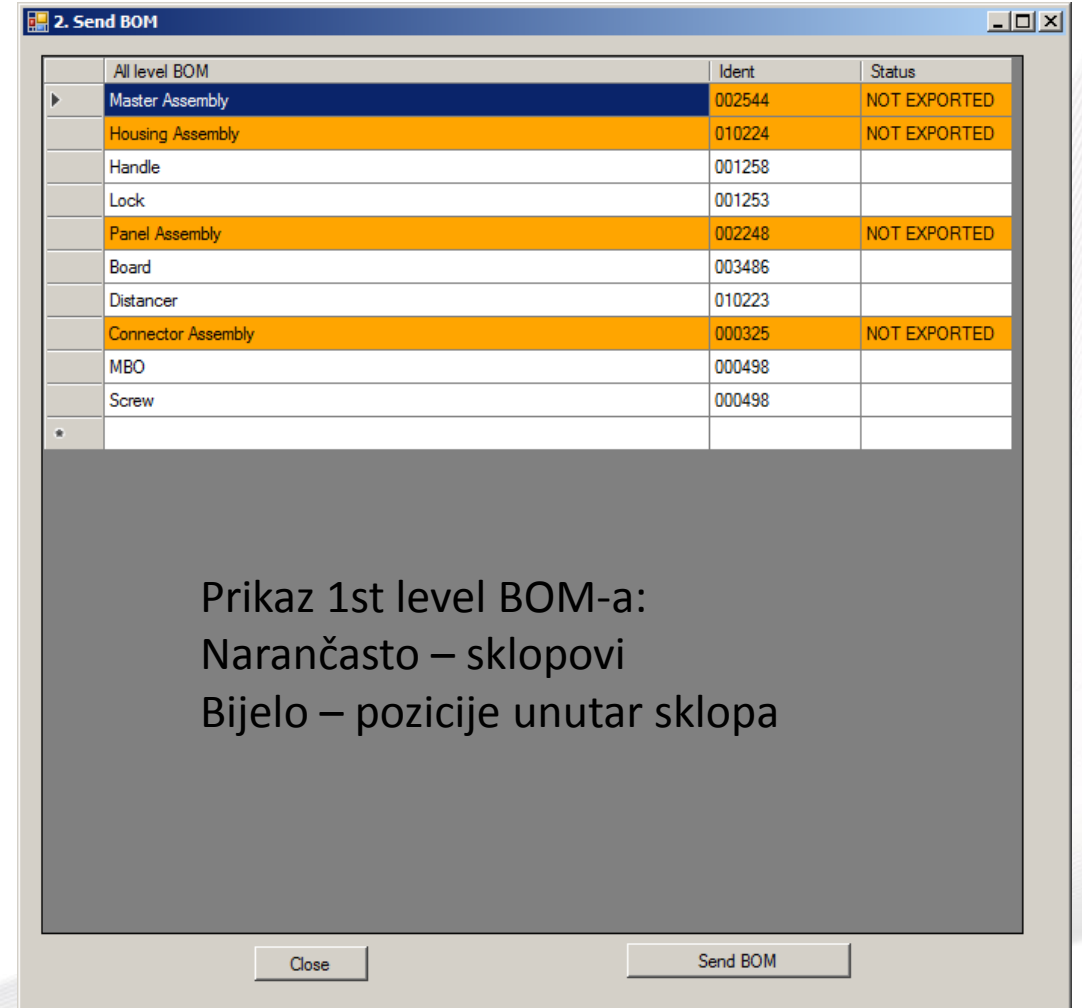
## CAD – ERP interface:

### 4. Export of the structure from CAD to GoSoft

- Sending BOM structure (1st level BOM)
- Check if all structures are created and exported

# CAD – ERP interface

- Required information :
  - When to send BOM structure (in which design phase)
  - What BOM structure is sent (1st level or all-level BOM), position by position or complete assemblies
  - Certain checks before sending that can stop the process if conditions not met (do all Indents exist)?
  - Which SW data is needed to perform syncing – indent of the subassembly + indents of the positions + amount (total and/or by position)



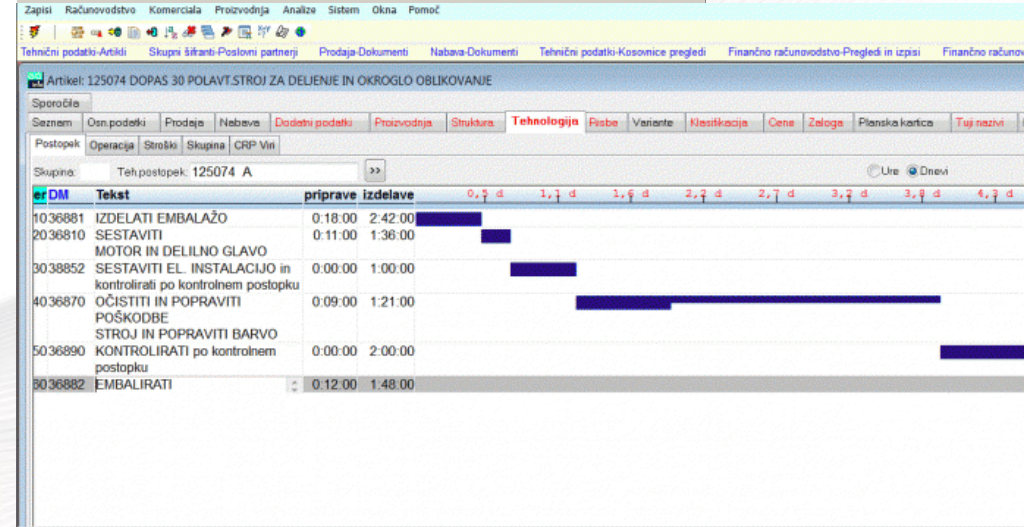
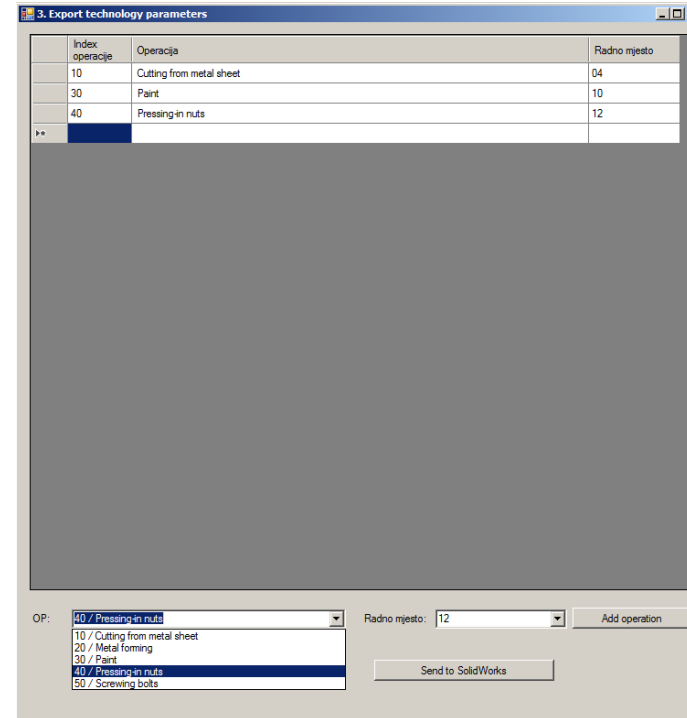
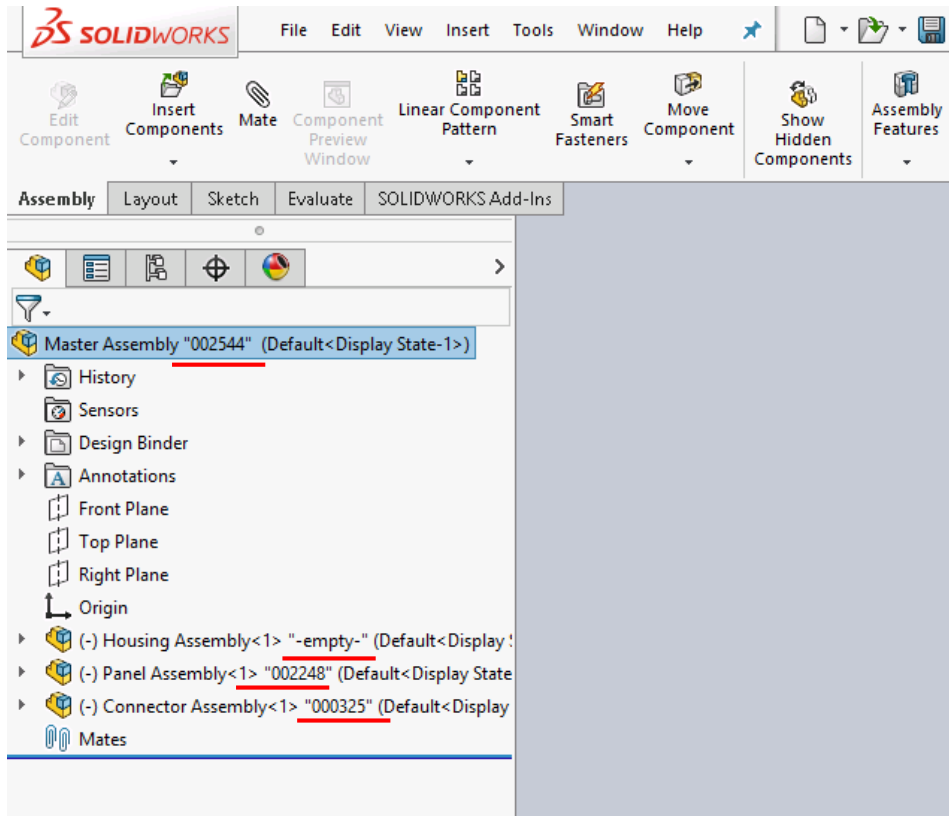
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# CAD – ERP interface



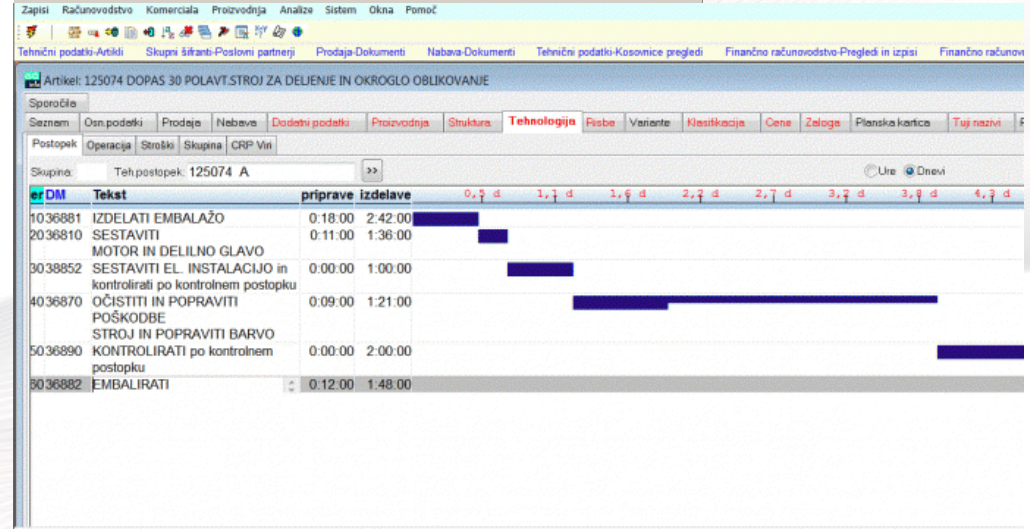
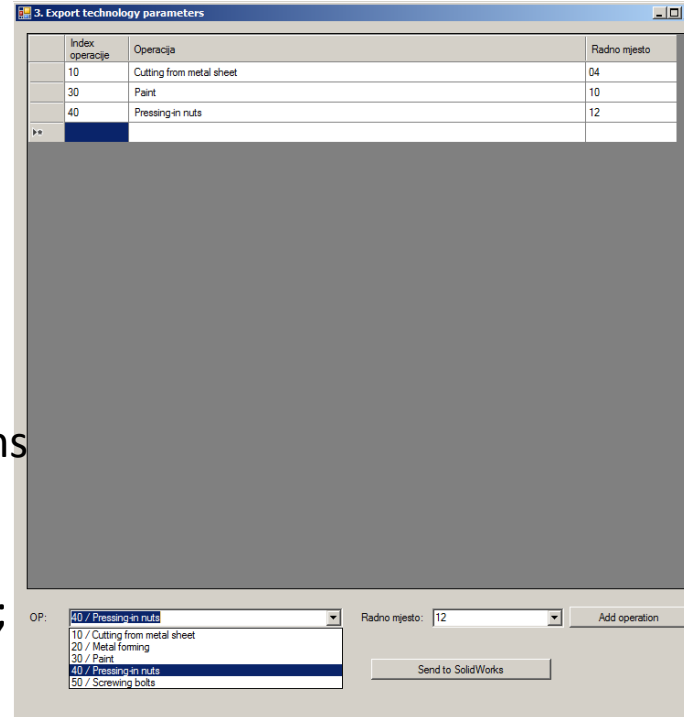
CAD – ERP interface:

## 5. Adding new data into ERP

- Technology data written into CAD
- Syncing / sending data into ERP
- Syncing of all available operations and workplaces with ERP

# CAD – ERP interface

- Required information :
  - When to send technology to GoSoft (after/before BOM structure or some other phase)
  - How to send technology to GoSoft (for position/Indent (bottom to top), for assembly, all subassemblies/positions below (top to bottom))
  - Dana to be sent (Order of the operations, number of the operation, name of the operation, time of the operation; selection method– drop-down menu with options)
  - Syncing of the technology dana with GoSoft (list of all operations, timings etc.)

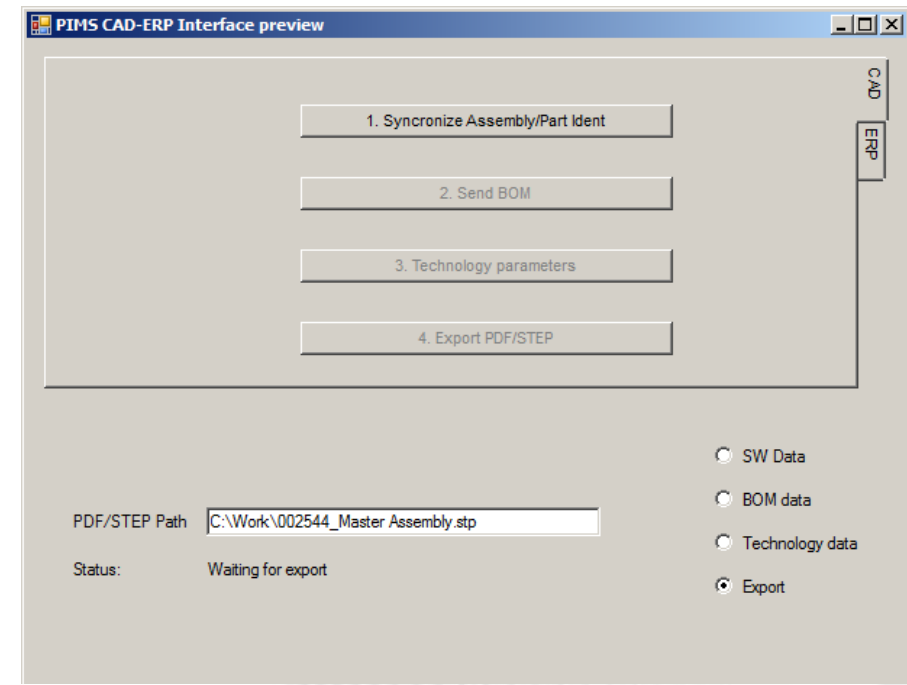
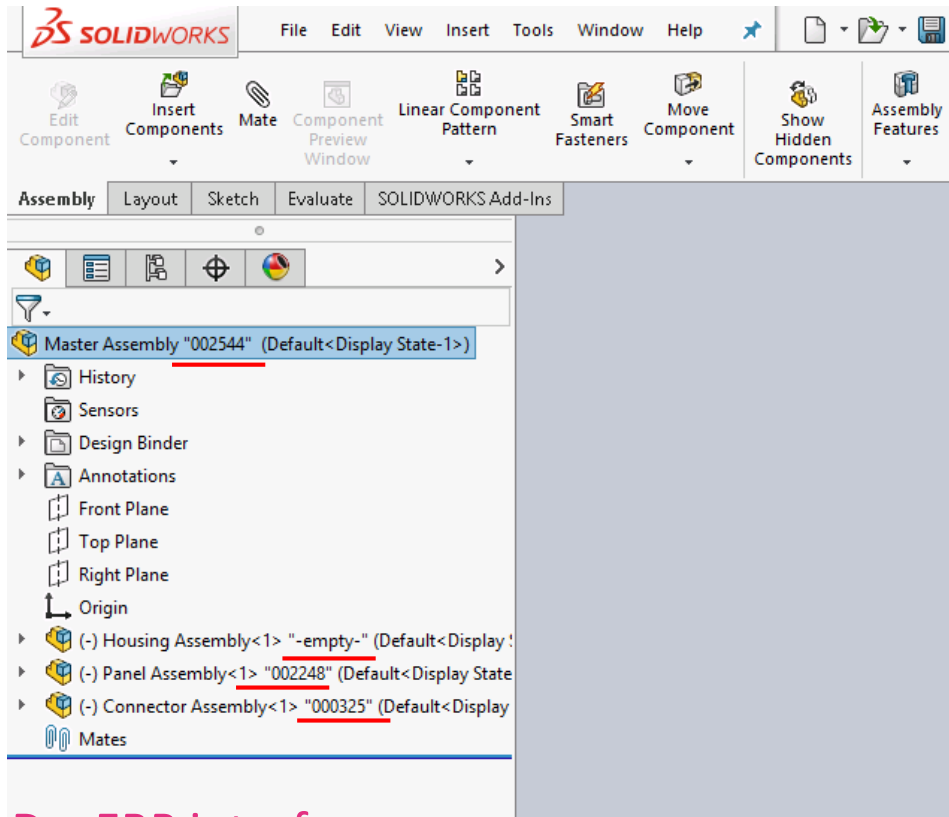


## CAD – ERP interface:

### 5. Adding new data into ERP

- Technology dana written into CAD
- Syncing / sending data into ERP
- Syncing of all available operations and workplaces with ERP

# CAD – ERP interface



## CAD – ERP interface:

### 6. Sending documentation to manufacturing

- Neutral formats (STEP, PDF)
- Archiving of all past versions