
Drawing from Project

In this task, we shall explore the capabilities of thinkteam in linking document data and drawings. We shall create drawings out of model and assembly saved in a project.

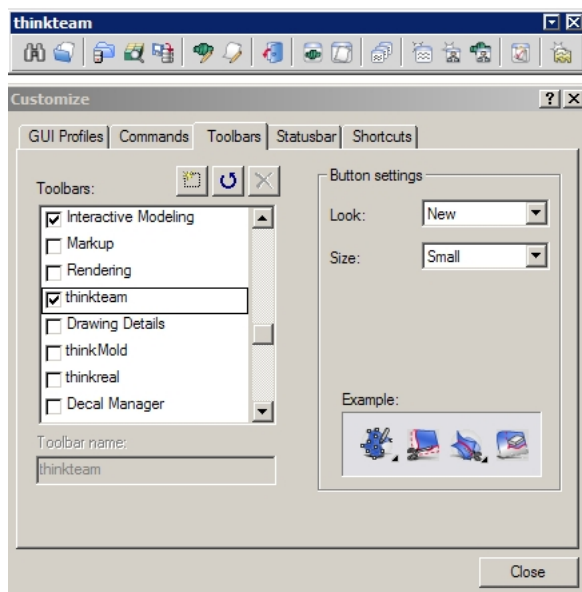
Table of Contents

1. Step 1: Linking document data and drawings	1
2. Step 2: Balloons, Part List & Raw Material List	5

1. Step 1: Linking document data and drawings

Before we get on with the task, let's pull out thinkteam toolbar; You can also invoke thinkteam commands from the new thinkteam menu.

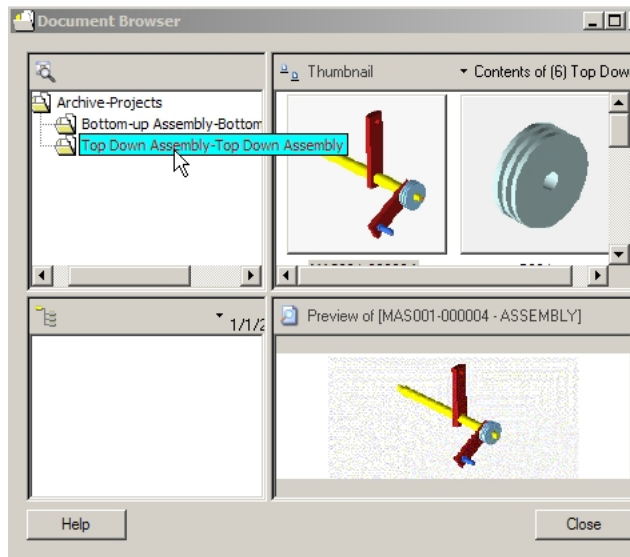
- Use command **Tools** → **Customize**.
- Click on Toolbars Tab and Select thinkteam.



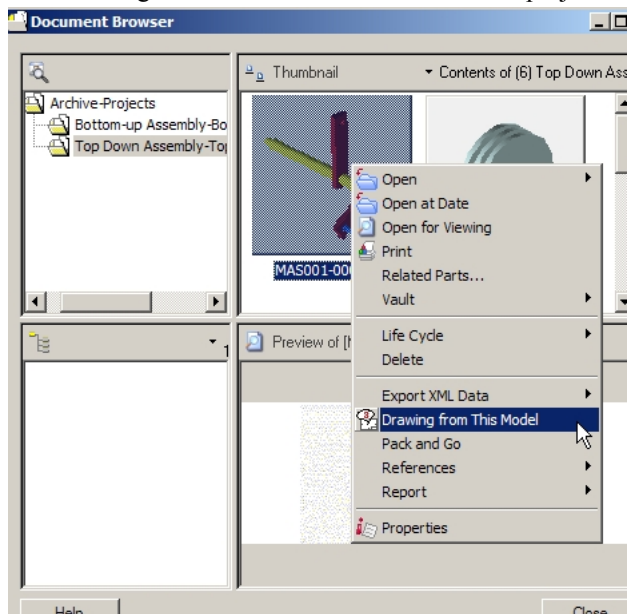
- Press Close.

Now we shall get on to the project and create the drawing.

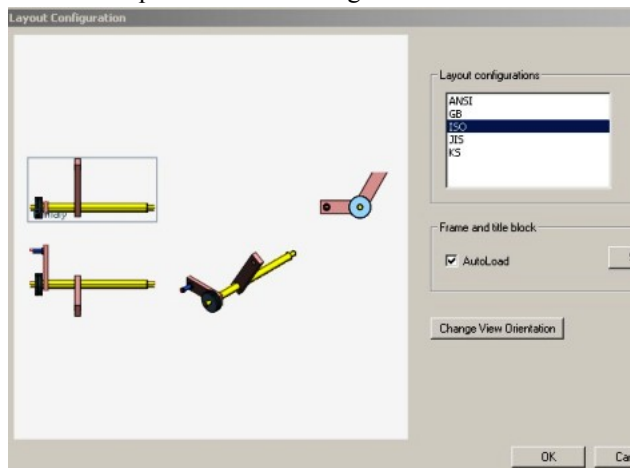
- Click on **Document Browser**.



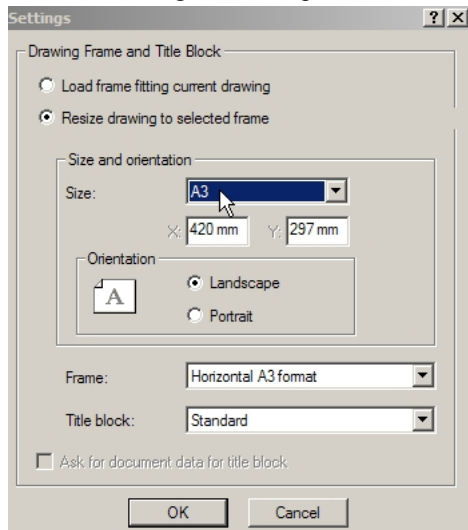
- Click Right Mouse Button on MA001 in the project window and select Drawing from This Model.



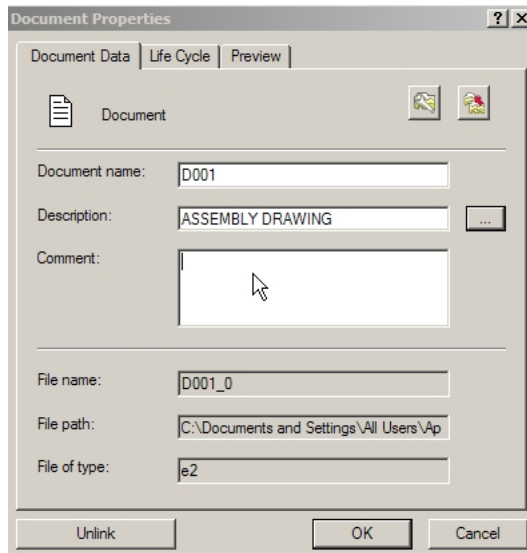
- Select Options as in the Image below:



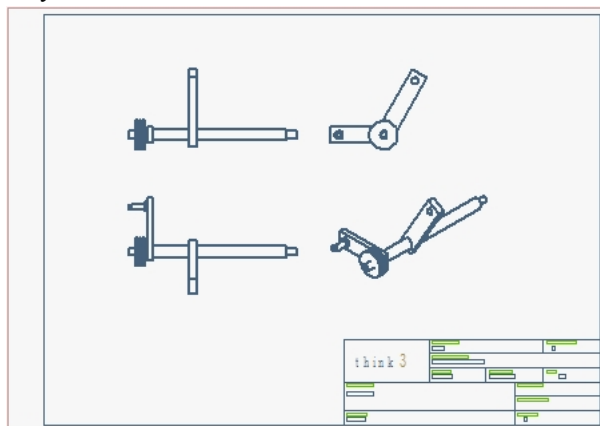
- Click Settings, Select Options as in the Image below and Press OK.



- Add document Data as in the image below In Document Properties window that pops up.

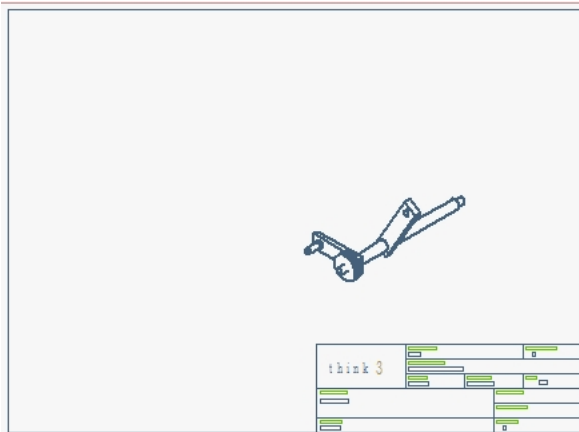


The Drawing appears as in the image below. We need to give only Part list and assembly view, So let us retain only 3D view and delete the rest.

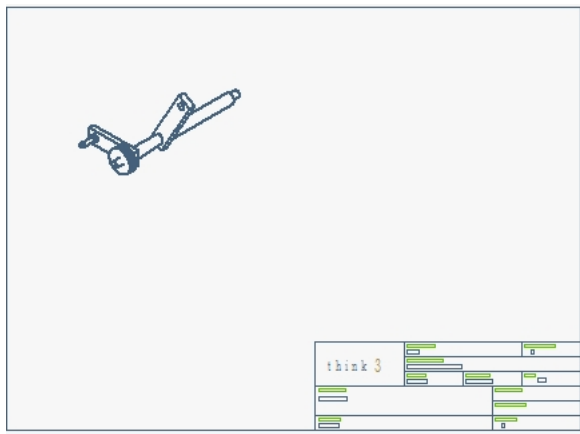


- Press Shift Button, Click on view "c" in History tree and then on view "a". This will select the three views.

- Right Click and select **Delete**.



- Click on the view, Drag and Move it to position shown in image below.



Well, we have the title block and form now, What about the Document data? Yes, thinkteam links all the document data that we added while creating the drawing automatically to respective title block fields. Let us zoom on to the title block and see this.

- Use command **View** → **Modify** → **Zoom Window** and zoom to the title block as in the image below:

think 3	Document Name: 0001	Document Version: 0
	Document Description: ASSEMBLY DRAWING	
	Created By: N Srihar	Creation Date: 02/09/2008
	Scale: 1:1	
Part Description: ASSEMBLY	Heat Treatment:	
	Surface Treatment:	
Part Number: MAS001	Part Version: 0	

All the document data is in place!

Let us save this drawing into the project.

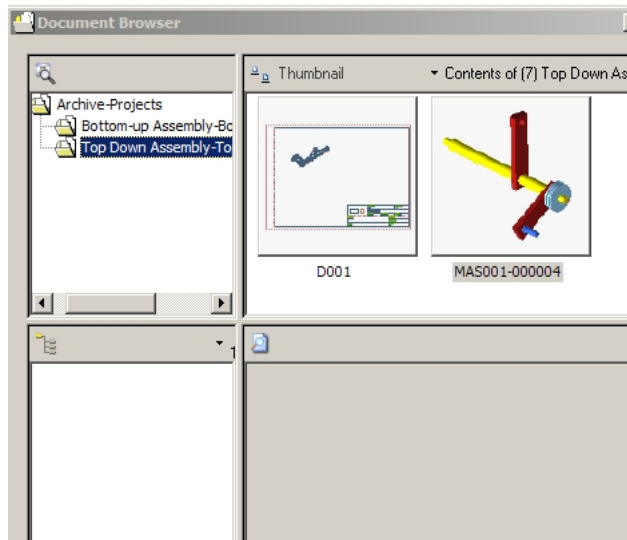
- Click on **Save into Archive**.
- Press OK.
- **Close** the drawing.

We have the drawing file ready now with title block, format and document data, but need to number the parts

with balloons. Let's do that in the next step.

2. Step 2: Balloons, Part List & Raw Material List

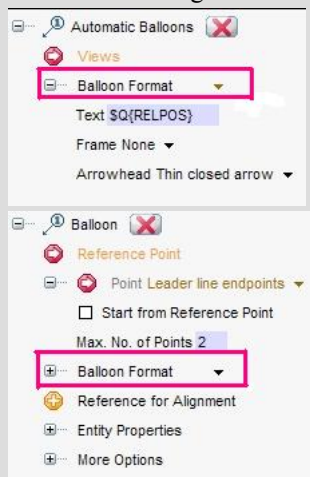
Open Document Browser and double click to Open the drawing that we saved just now.



Now let's insert Balloons on the drawing. The manual method is useful when there are a few parts in the assembly drawing. When the number of parts is more, this method becomes cumbersome. There is a way to overcome this. We can use **Insert > Balloons > Automatic** command to place balloons automatically. Let us do that.

Balloon - Selection List

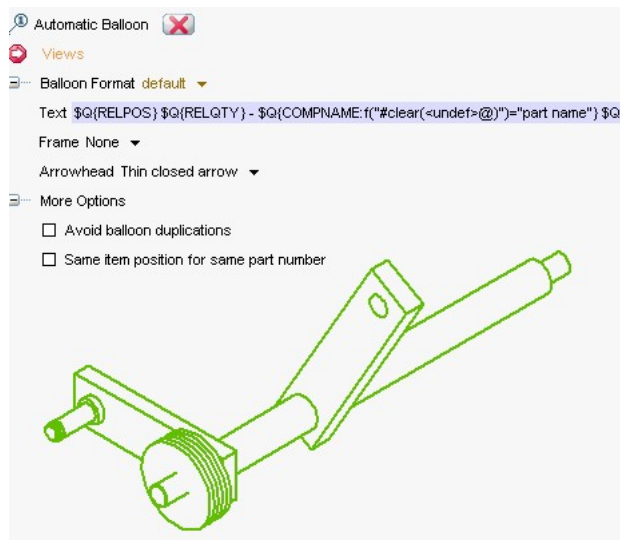
From the Version 2008.1, there is a new selection list for the Insert - Balloon - Automatic/Manual commands as shown in the image below.



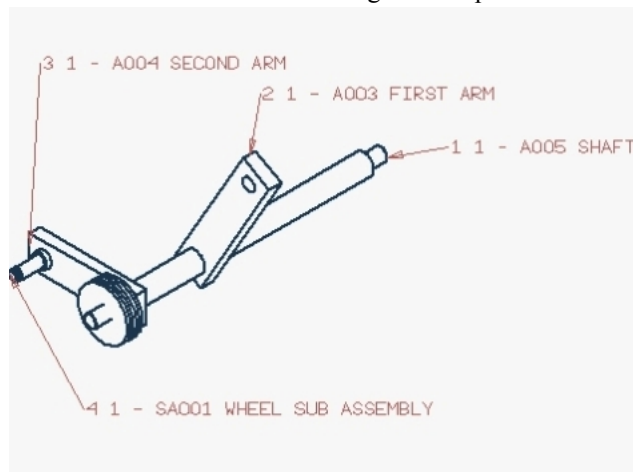
By default, Automatic Balloon command will insert only the Position (as defined using INSERT > ITEM POSITION PROPERTY) of the Components in the Assembly. The Balloon formats can be customized as per the user requirement from Organize Formats command. The customized Balloon formats can be selected from the Balloon Format Pull down in the selection list as shown in above image.

- Use command **Automatic Balloons** and set the Format as Default from the drop down.

- Select the view.
- Hit OK.



- Click on each balloon and drag them to place as in the image below:

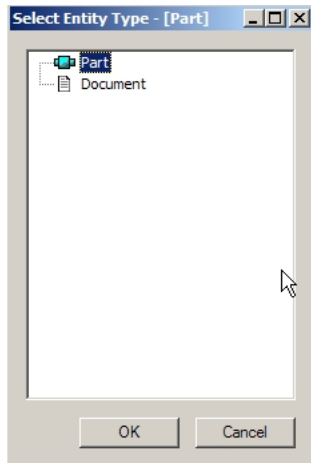


Let us Save this Drawing back Into Project.

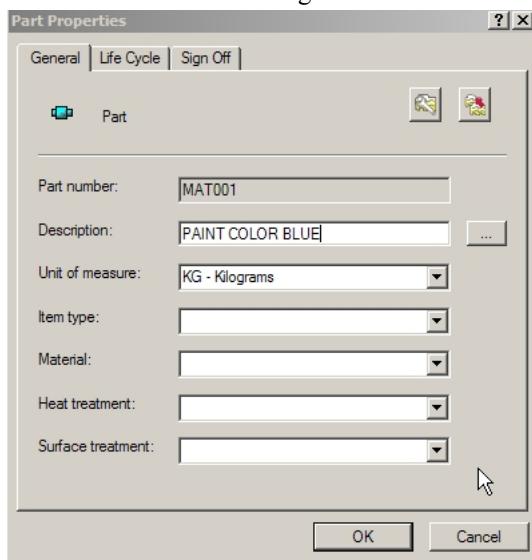
- Click on **Save into Archive**.
- Press OK.

We require to add part list to this Drawing. Apart from parts, we also need to add raw materials to the list. Let us add some Raw materials to the database.

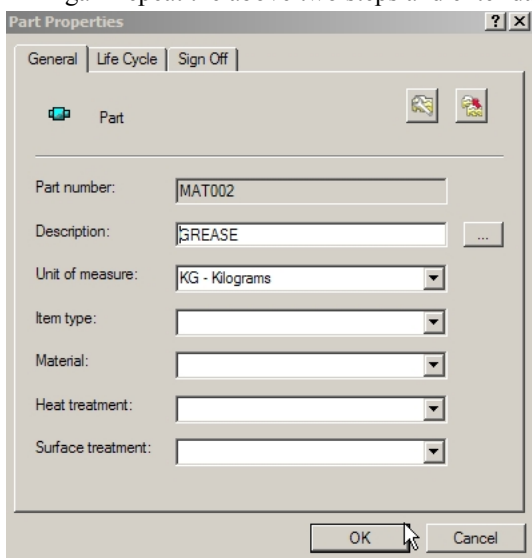
- Click on the New Entity Icon on the toolbar.
- Select Part and click OK.



- Enter data as in the Image below and Press OK.



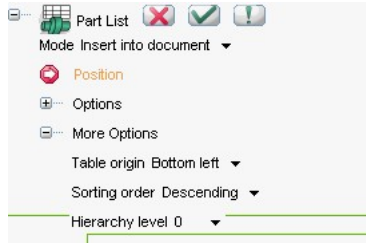
- Again repeat the above two steps and enter data as in Image below.



- Press OK.

All right, now we are ready to insert a part list with all the data. Let us insert a part list above the title block.

- Use command **Tools**  **Part List**
- Press OK for Part List Dialog as shown.

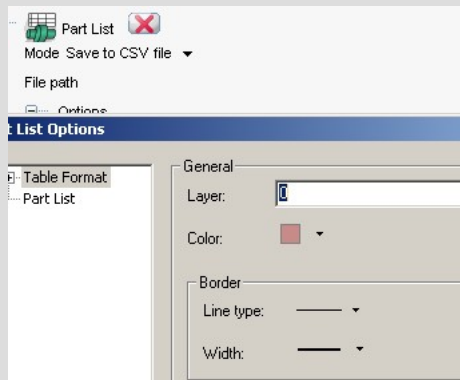


Part List Improvements:

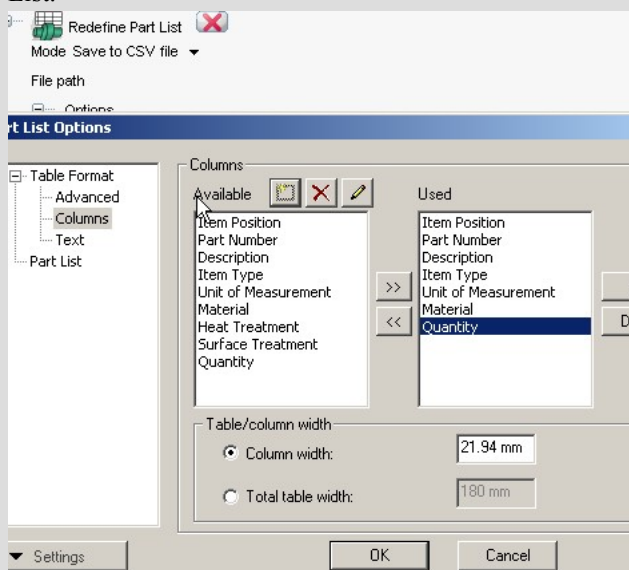
Some enhancements has been made in the Part List command in ThinkDesign 2009.1 version.

- Save to CSV file

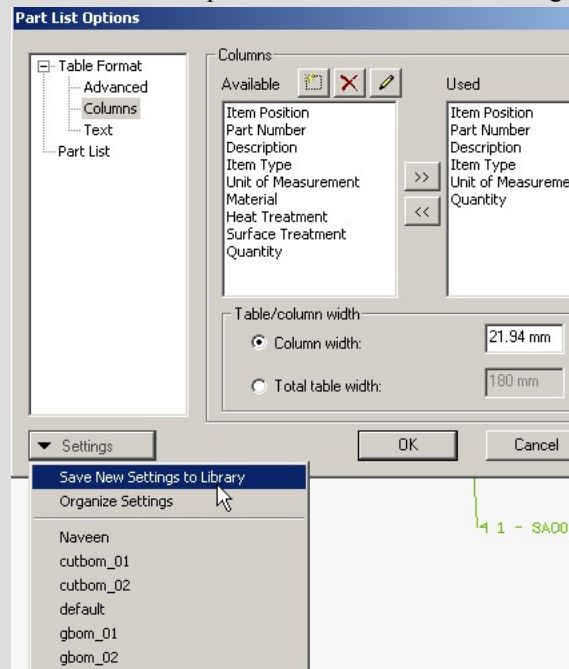
Now, it is possible to export the Part List to MS Excel using the option Save to CSV file. Activate the Part List command and select the Save to CSV file from the Mode Drop Down list.



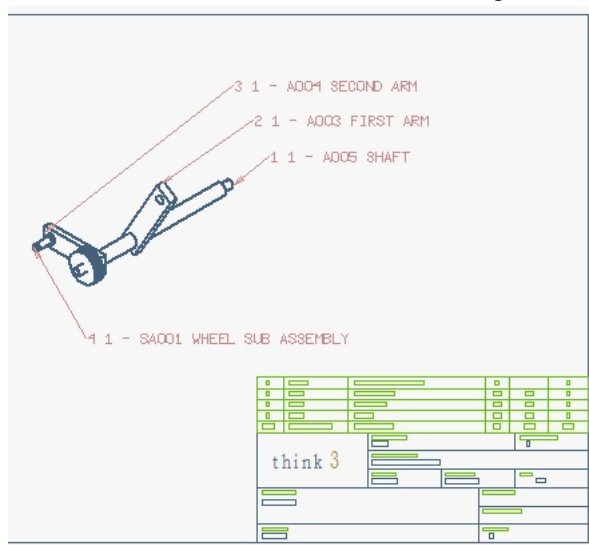
It is also possible to create custom Part List formats. Users can select the Columns they like to see in the Part List.



The custom made part lists can be saved as a configuration into the library.



- Place it above the title block as in the image below and Click.



Not sure what is there in the part list? Let us zoom on it.

- Use command **View** → **Modify** → **Zoom Window** and zoom on to the part list.

Here is the part list with all details!

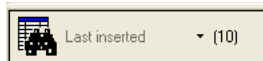
4	SAS01	WHEEL SUB ASSEMBLY	A		1
3	A004	SECOND ARM	NR	MM	1
2	A003	FIRST ARM	NR	MM	1
1	A005	SHAFT	NR	MM	1
Seq	Part Number	Description	IT	UM	Qty
think 3		Document Name:	D001		
		Document Title:	0		
		Document Description:	ASSEMBLY DRAWING		
		Created By:	Naridhar	Creation Date:	02/09/2008
		Sheet:	1:1		
Part Description:		ASSEMBLY		Heat Treatment:	
				Surface Treatment:	
Part Number:		MAS001		Part Version:	0

Let us place the Raw material list now.

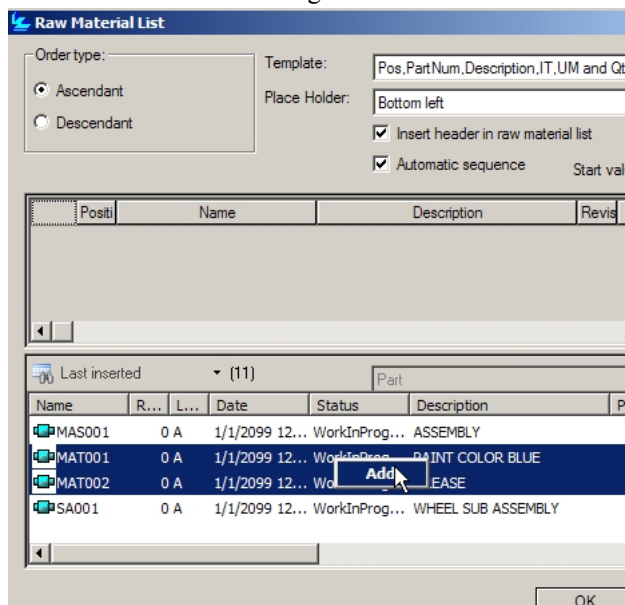
- Use command **Raw Material List**.

The two large frames in the lower part of the Raw Material List dialog contain the current material list at the top and a thinkteam Query View at the bottom.

- In Query View, Pull down the list and Make it Last Inserted (See Image Below):



- Press OK for the dialog that appears.
- Now, hold shift button and select MAT001 and MAT002.
- Click Right Mouse button and select Add.
- The Raw Material Dialog box Now looks as below:



- Add Pos (Position) and Quantity values as in the Image Below.
- Uncheck the Insert Header in Raw Material List and Automatic Sequence Check Boxes.

Raw Material List

Order type:
☒ Ascendant
☐ Descendant

Template: Pos,PartNum,Description,IT,UM and Qty
 Place Holder: Bottom left
☐ Insert header in raw material list
☐ Automatic sequence Start value

	Positi	Name	Description	Revision	Status	U. M.	Quantity
1	5	MAT001	PAINT	0	WorkInProgre	KG	5
2	6	MAT002	GREASE	0	WorkInProgre	KG	2

Last inserted (11) Part

Name	R...	L...	Date	Status	Description	P.
------	------	------	------	--------	-------------	----

- Press OK.
- Place it above the part list and Click.
- Now the part list and Raw Material list appear as below:

6	MAT002	GREASE
5	MAT001	PAINT COLOR BLUE
4	SA001	WHEEL SUB ASSEMBLY
3	A004	SECOND ARM
2	A003	FIRST ARM
1	A005	SHAFT
Seq	Part Number	Description

think 3		Document Name:
		D 0 0 1
		Document Description:
		ASSEMBLY DRAWING
		Created By:
		Nsrldhar
		Part Description:

Let us save the Drawing into Project.

- Click on **Save into Archive**.
- Press OK.