

Import Design

In this tutorial you will learn ways how to import designs from other sources.

- Import design from file
- Import design by copy and paste

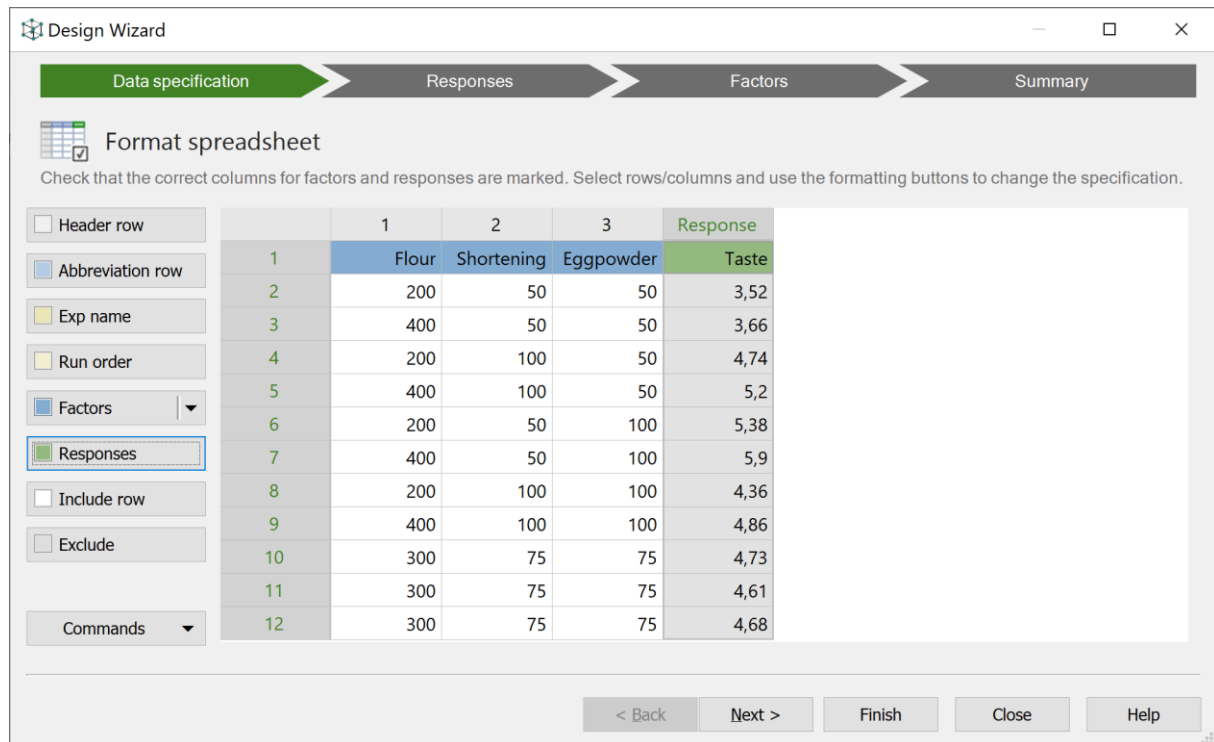
Import Design From File

Designs can be imported from other files such as text, dif, csv and Excel files. Designs can also be imported from other MODDE investigations.

Click **File/New/Import external design**. In the File Open dialog select a file and open it (in this case select "Import design.xls").

By default, all data columns are identified as quantitative factors. Mark the fourth column (Taste) and click **Responses**.

If you import designs with other factor types, mark the factor and then click the arrow on the Factors button and select correct factor type.



Design Wizard

Data specification → Responses → Factors → Summary

Format spreadsheet

Check that the correct columns for factors and responses are marked. Select rows/columns and use the formatting buttons to change the specification.

☐ Header row

☐ Abbreviation row

☐ Exp name

☐ Run order

☐ Factors

☒ Responses

☐ Include row

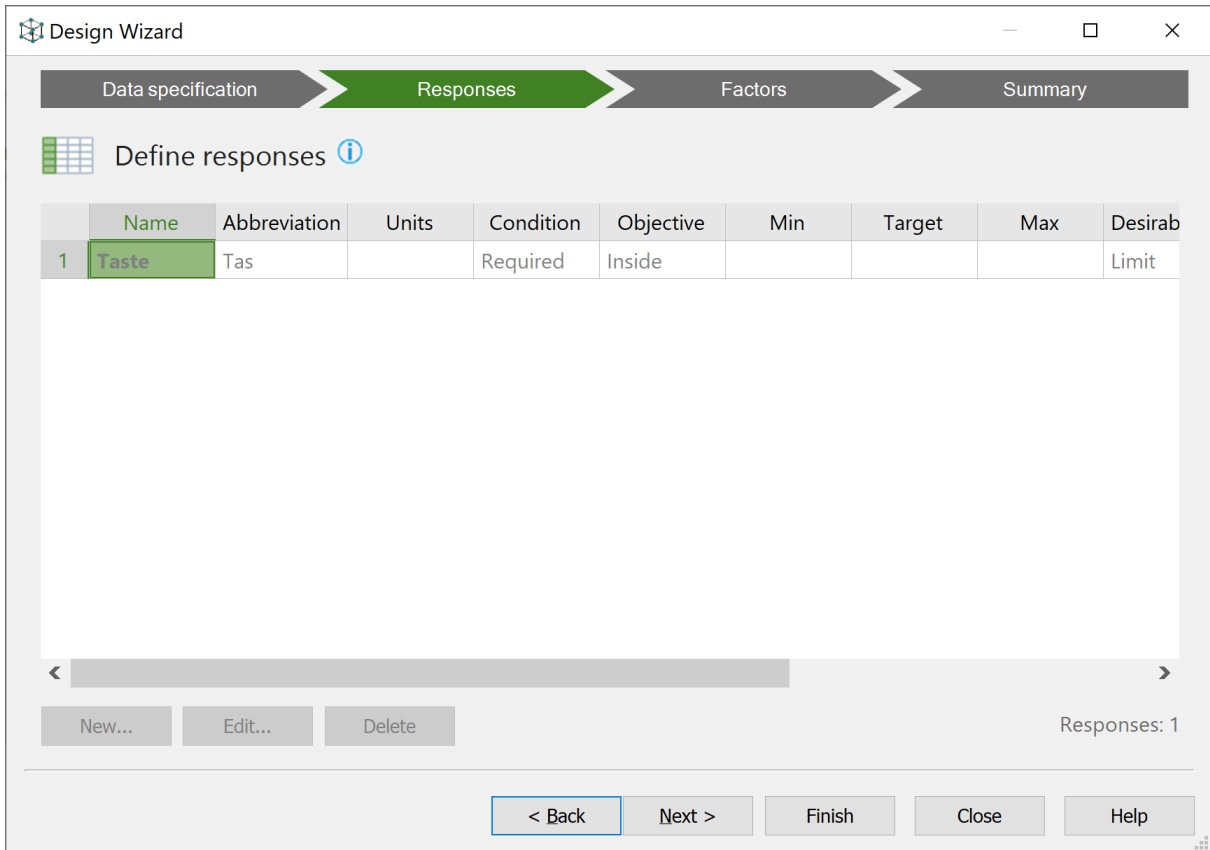
☐ Exclude

Commands

	1	2	3	Response
1	Flour	Shortening	Eggpowder	Taste
2	200	50	50	3,52
3	400	50	50	3,66
4	200	100	50	4,74
5	400	100	50	5,2
6	200	50	100	5,38
7	400	50	100	5,9
8	200	100	100	4,36
9	400	100	100	4,86
10	300	75	75	4,73
11	300	75	75	4,61
12	300	75	75	4,68

< Back Next > Finish Close Help

Click **Next** and the response specification opens.

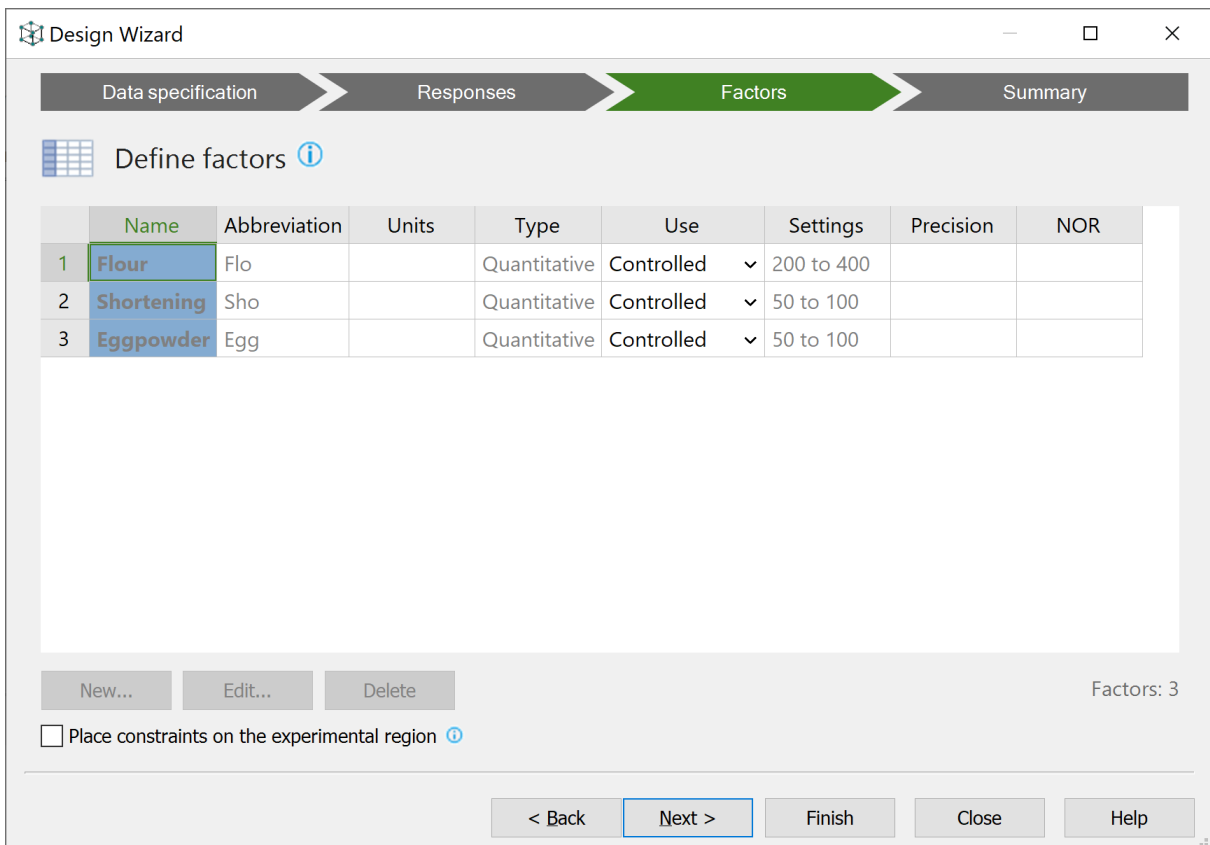


The Design Wizard window shows the 'Define responses' step. The progress bar at the top indicates the current step is 'Responses', with 'Data specification', 'Factors', and 'Summary' as previous and subsequent steps. The main area is titled 'Define responses' with an information icon. Below the title is a table with the following data:

	Name	Abbreviation	Units	Condition	Objective	Min	Target	Max	Desirab
1	Taste	Tas		Required	Inside				Limit

Below the table are buttons for 'New...', 'Edit...', and 'Delete'. A status bar at the bottom right shows 'Responses: 1'. At the very bottom are navigation buttons: '< Back', 'Next >', 'Finish', 'Close', and 'Help'.

Click **Next** and factor specification opens. Check the settings and make modifications if necessary.



The Design Wizard window shows the 'Define factors' step. The progress bar at the top indicates the current step is 'Factors', with 'Data specification', 'Responses', and 'Summary' as previous and subsequent steps. The main area is titled 'Define factors' with an information icon. Below the title is a table with the following data:

	Name	Abbreviation	Units	Type	Use	Settings	Precision	NOR
1	Flour	Flo		Quantitative	Controlled	200 to 400		
2	Shortening	Sho		Quantitative	Controlled	50 to 100		
3	Eggpowder	Egg		Quantitative	Controlled	50 to 100		

Below the table are buttons for 'New...', 'Edit...', and 'Delete'. A status bar at the bottom right shows 'Factors: 3'. Below this is a checkbox labeled 'Place constraints on the experimental region' with an information icon. At the very bottom are navigation buttons: '< Back', 'Next >', 'Finish', 'Close', and 'Help'.

Click **Next** to see the Summary:

Design Wizard

Data specification > Responses > Factors > **Summary**

	1	2
1	Objective	--
2	Process model	Linear
3	Mixture model	--
4		
5	Design	Custom
6	Runs in design	11
7	Center points	--
8	Replicated runs	--
9	Replicates	--
10	N = actual runs	11
11	Maximum runs	12000
12	Constraints	No

< Back Next > **Finish** Close Help

Click **Finish** and the worksheet with data is shown:

Worksheet

	1	2	3	4	5	6	7	8
	Exp No	Exp Name	Run Order	Incl/Excl	Flour	Shortening	Eggpowder	Taste
1	1	N1	3	Incl ✓	200	50	50	3,52
2	2	N2	5	Incl ✓	400	50	50	3,66
3	3	N3	4	Incl ✓	200	100	50	4,74
4	4	N4	1	Incl ✓	400	100	50	5,2
5	5	N5	8	Incl ✓	200	50	100	5,38
6	6	N6	11	Incl ✓	400	50	100	5,9
7	7	N7	7	Incl ✓	200	100	100	4,36
8	8	N8	10	Incl ✓	400	100	100	4,86
9	9	N9	2	Incl ✓	300	75	75	4,73
10	10	N10	9	Incl ✓	300	75	75	4,61
11	11	N11	6	Incl ✓	300	75	75	4,68

Save the imported investigation and give it an appropriate name.

Import Design by Pasting Data

Open the external file in a program where you can copy the data. In this case, open "Import design.xls" in Excel.

Mark the worksheet in Excel and copy it.

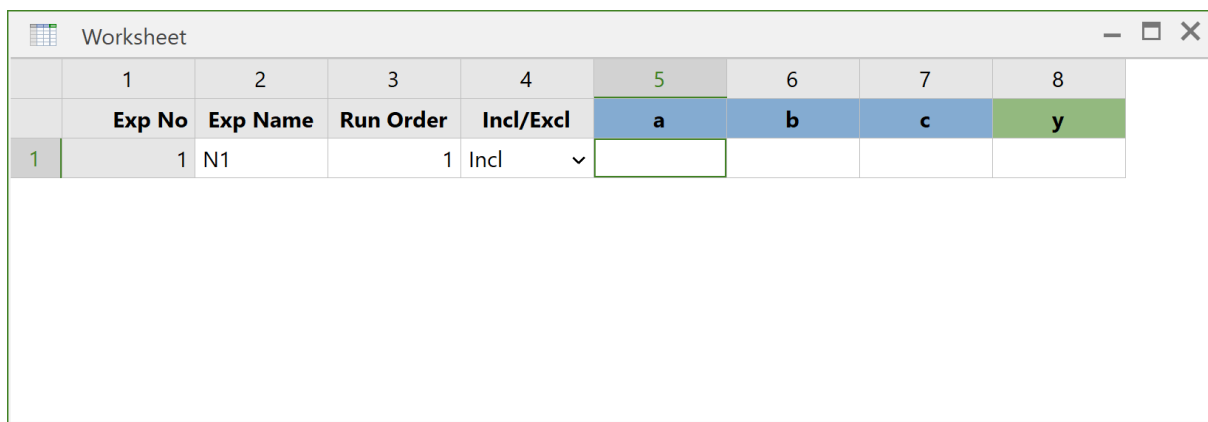
In MODDE, go to **File/New/Paste data**. In the Design wizard that opens, paste the data.

Now, format the data: mark the first three columns and click **Factors**, mark the fourth column and click **Responses**. Mark the first row and click **Header row**.

The remaining steps are the same as importing a design from file.

Paste Data in the Worksheet

A third option is to specify the responses and factors in the design wizard and then close the wizard without specifying a design. Then under **Worksheet** ribbon tab, click **Worksheet**. An empty worksheet opens.



	1	2	3	4	5	6	7	8
	Exp No	Exp Name	Run Order	Incl/Excl	a	b	c	y
1	1	N1	1	Incl				

Copy the data (e.g. from Excel)

	A	B	C	D
1	200	50	50	3,52
2	400	50	50	3,66
3	200	100	50	4,74
4	400	100	50	5,2
5	200	50	100	5,38
6	400	50	100	5,9
7	200	100	100	4,36
8	400	100	100	4,86
9	300	75	75	4,73
10	300	75	75	4,61
11	300	75	75	4,68

Paste it in the cell for the first factor:

	1	2	3	4	5	6	7	8
	Exp No	Exp Name	Run Order	Incl/Excl	a	b	c	y
1	1	N1	1	Incl	✓			

All data will be pasted to create the full worksheet.

Worksheet

	1	2	3	4	5	6	7	8	
	Exp No	Exp Name	Run Order	Incl/Excl	a	b	c	y	
1	1	N1	9	Incl	✓	200	50	50	3,52
2	2	N2	6	Incl	✓	400	50	50	3,66
3	3	N3	2	Incl	✓	200	100	50	4,74
4	4	N4	3	Incl	✓	400	100	50	5,2
5	5	N5	5	Incl	✓	200	50	100	5,38
6	6	N6	8	Incl	✓	400	50	100	5,9
7	7	N7	7	Incl	✓	200	100	100	4,36
8	8	N8	1	Incl	✓	400	100	100	4,86
9	9	N9	4	Incl	✓	300	75	75	4,73
10	10	N10	10	Incl	✓	300	75	75	4,61
11	11	N11	11	Incl	✓	300	75	75	4,68