

Test TP : Full factorial

A machine is used to fill 5-gallon metal containers with soft drink syrup. The variable of interest is the amount of syrup loss due to frothing. Three factors are thought to influence frothing: the nozzle design (A), the filling speed (B), and the operating pressure (C)

N ° essai	nozzle design	speed	pressure	response
1	-1	-1	-1	1,7
2	1	-1	-1	4,57
3	-1	1	-1	0,55
4	1	1	-1	3,39
5	-1	-1	1	1,51
6	1	-1	1	4,59
7	-1	1	1	0,67
8	1	1	1	4,29

-What is the response here?

- Determine the mathematical model (first and second order)
- Specify the interaction between the factors
- Determine the effects of each factor
- Give the interpretation of plot effects
- Write the important parameters from ANOVA table