

Test TD : 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 |

1-What is the response here?

- ✓ Specify the interaction between the factors
- ✓ Determine the effects of each factor
- ✓ Give the interpretation of plot effects