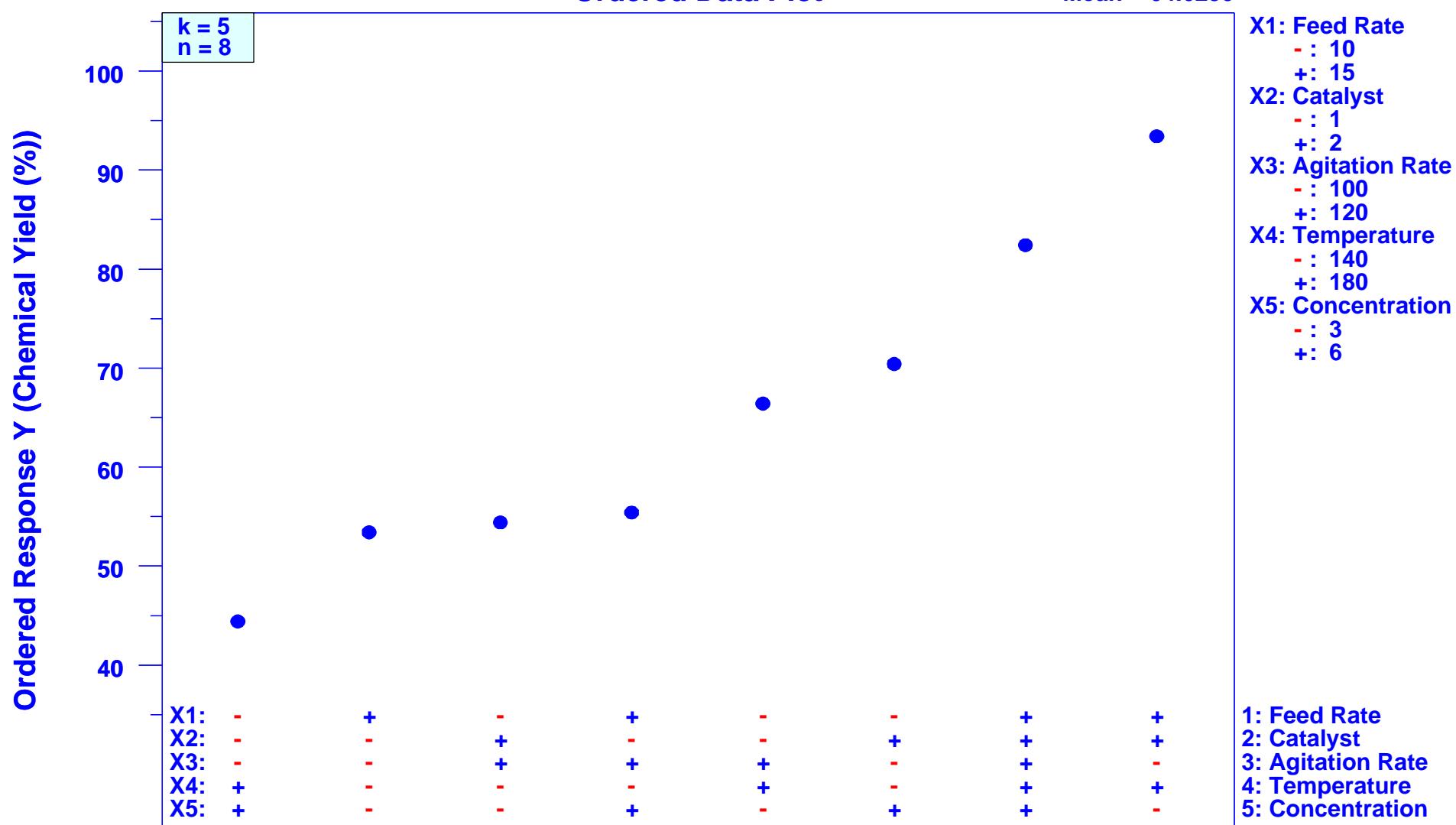


Chemical Reactor Yield (Box, Hunter, & Hunter)
Design: $2^{**}(5-2)$ ($k=5, n=8$)

Ordered Data Plot

Mean = 64.6250

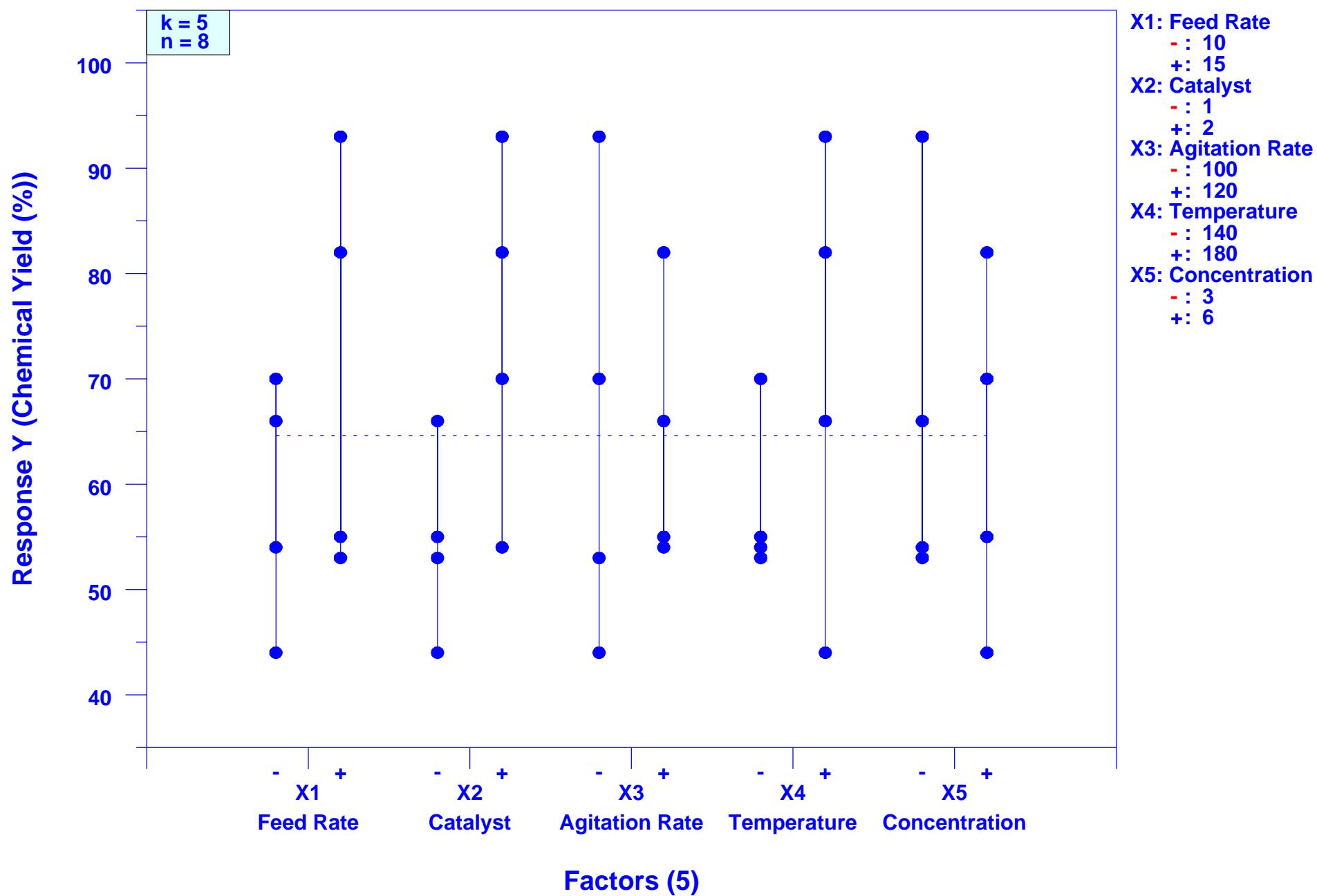


Chemical Reactor Yield (Box, Hunter, & Hunter)

Design: $2^{**}(5-2)$ ($k=5, n=8$)

Scatter Plot

Mean = 64.6250

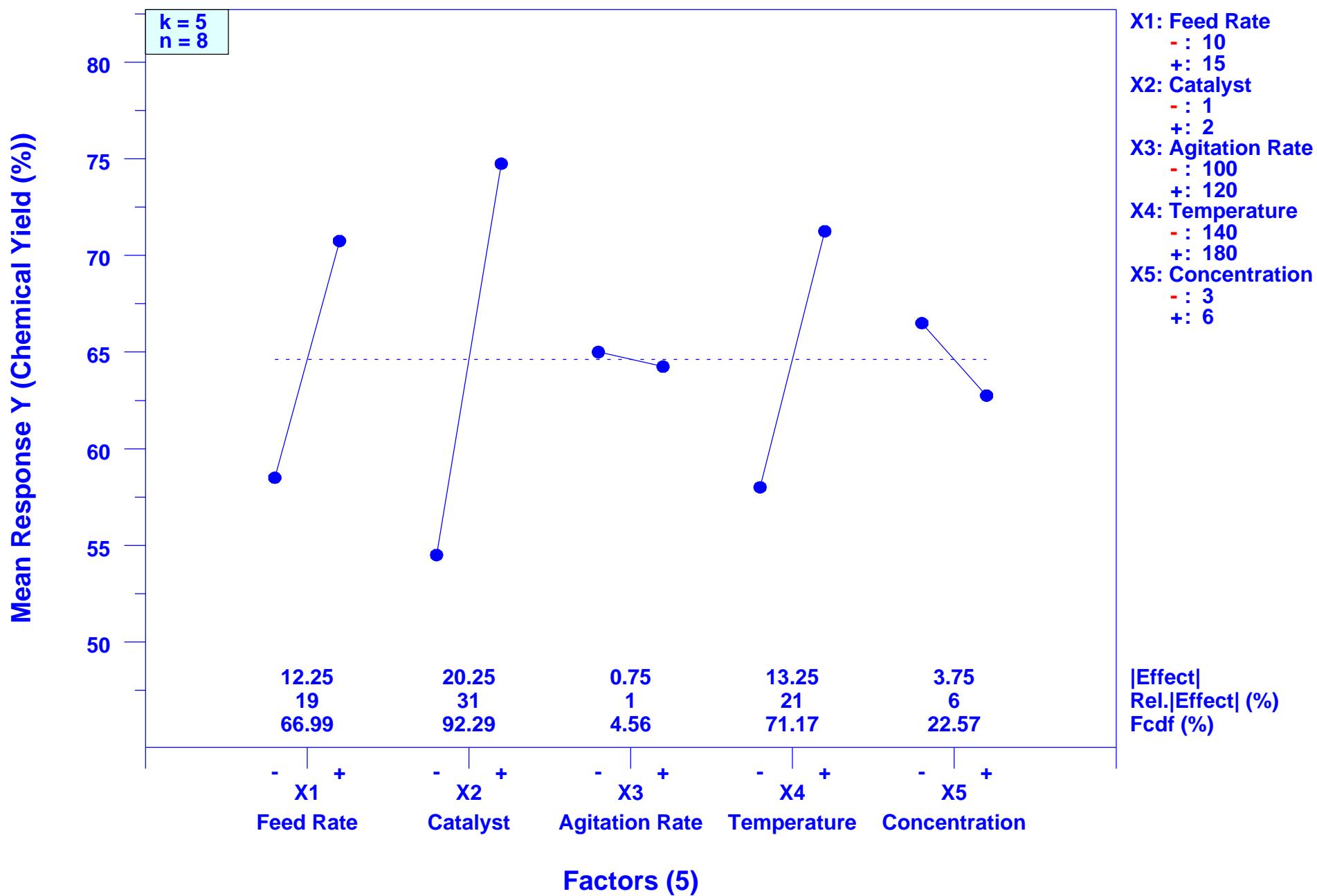


Chemical Reactor Yield (Box, Hunter, & Hunter)

Design: $2^{**}(5-2)$ ($k=5, n=8$)

Main Effects Plot

Mean = 64.6250

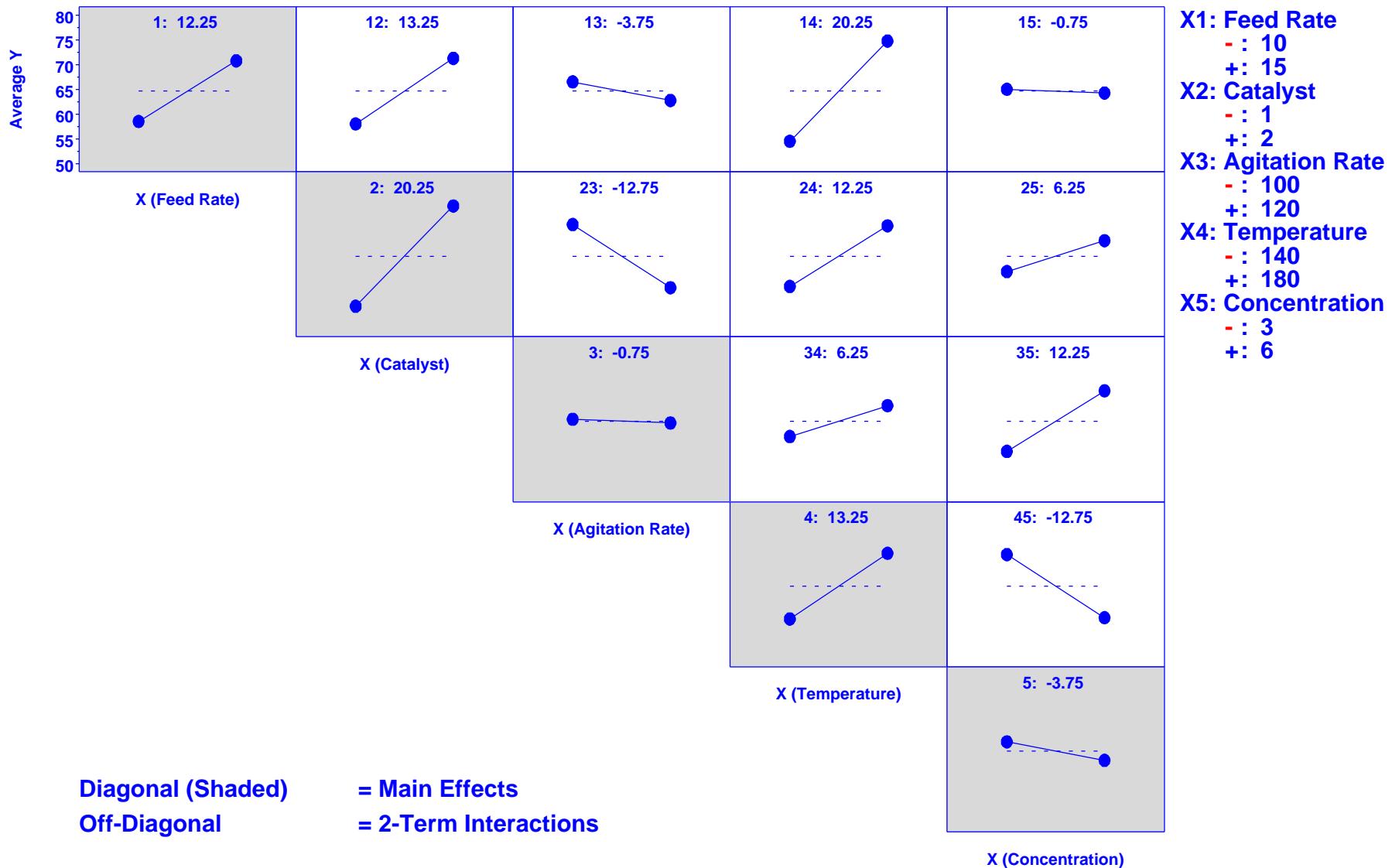


Chemical Reactor Yield (Box, Hunter, & Hunter)

Design: $2^{**}(5-2)$ ($k=5, n=8$)

Interaction Effects Matrix

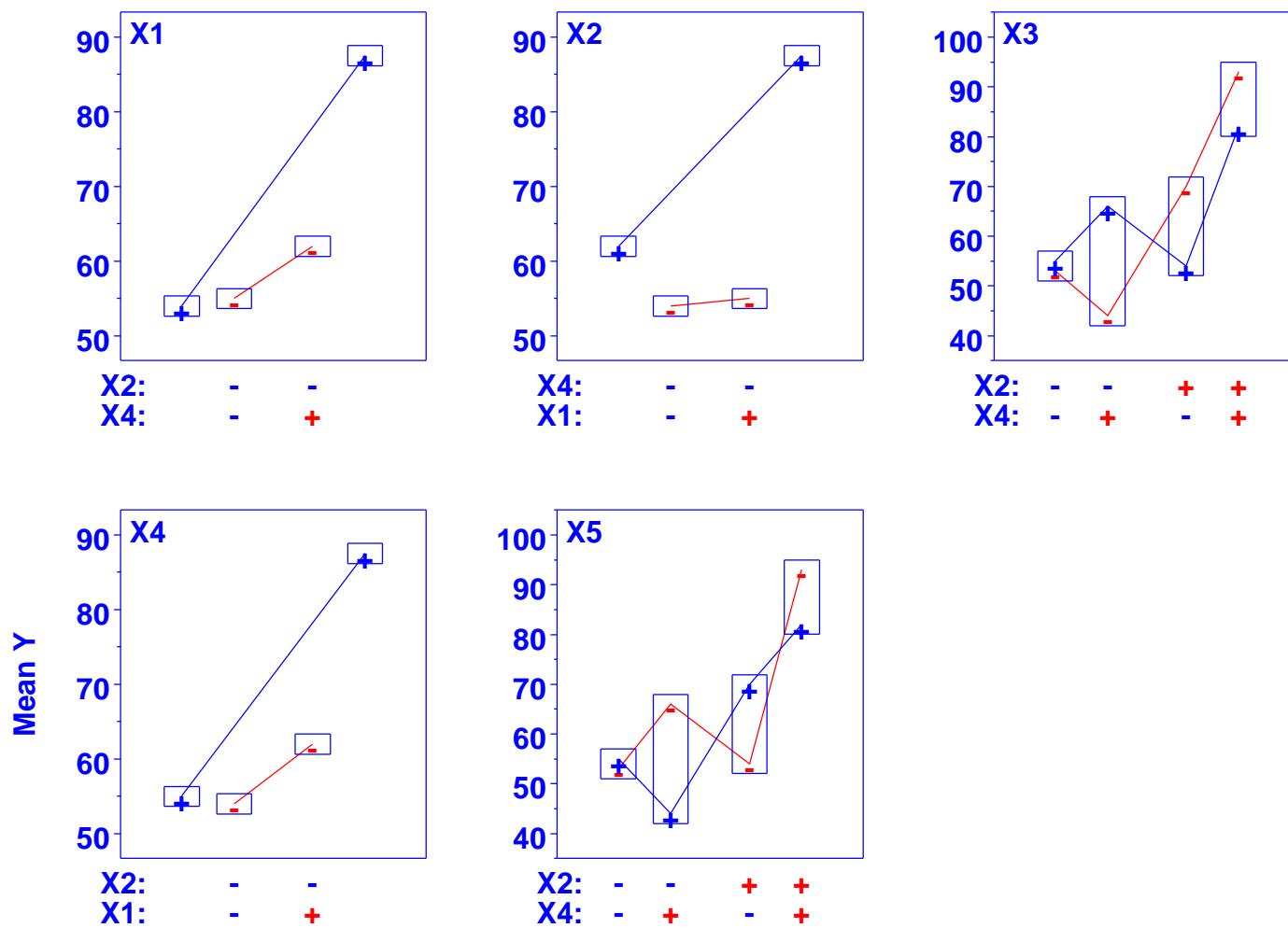
Mean = 64.6250



Chemical Reactor Yield (Box, Hunter, & Hunter)

Design: $2^{**}(5-2)$ ($k=5, n=8$)

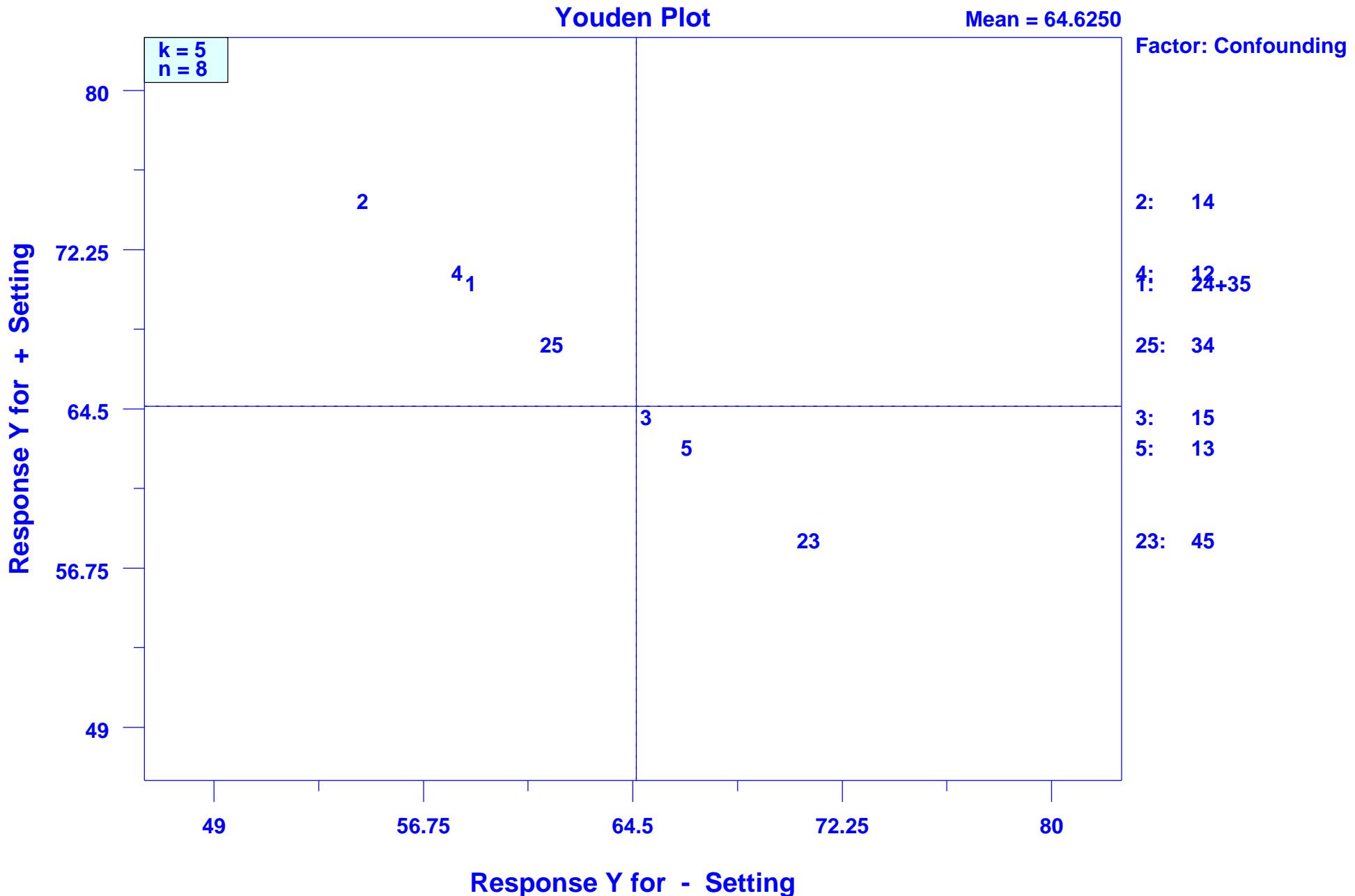
Block Plot



Robustness Factor Setting

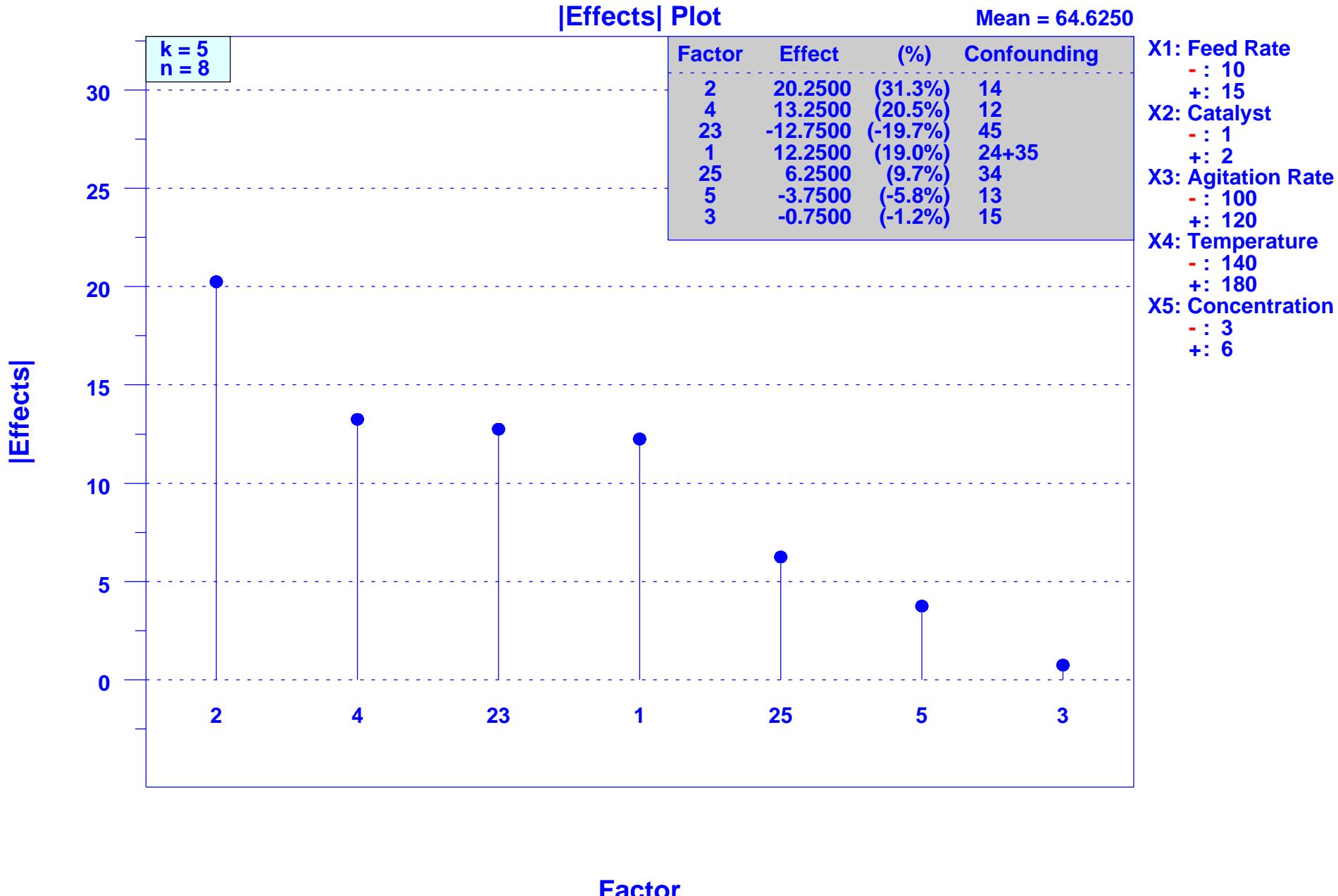
- | | |
|---------------------------|---------|
| X1: Feed Rate | - : 10 |
| | +: 15 |
| X2: Catalyst | - : 1 |
| | +: 2 |
| X3: Agitation Rate | - : 100 |
| | +: 120 |
| X4: Temperature | - : 140 |
| | +: 180 |
| X5: Concentration | - : 3 |
| | +: 6 |

Chemical Reactor Yield (Box, Hunter, & Hunter)
Design: $2^{**}(5-2)$ ($k=5, n=8$)



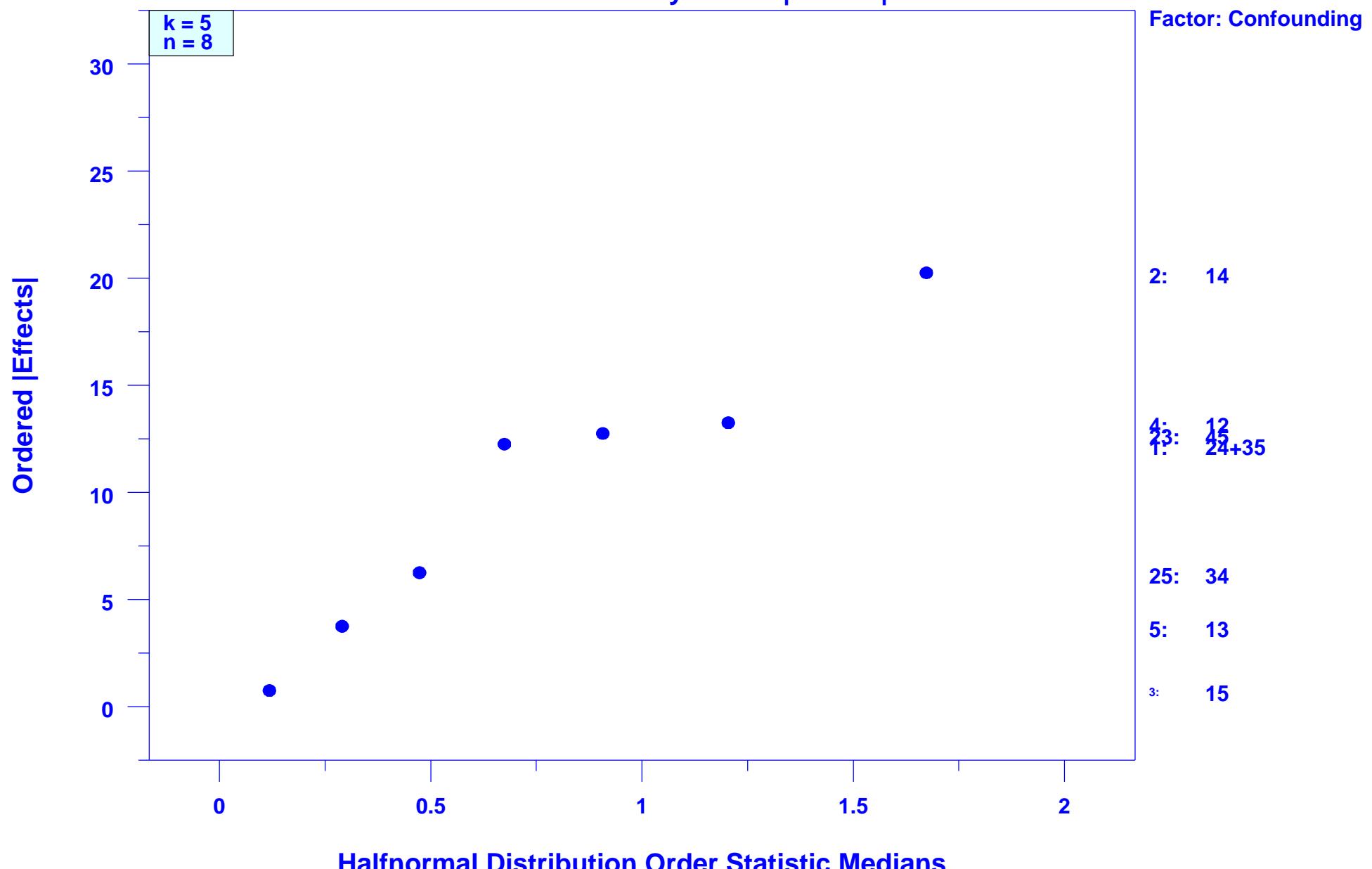
Chemical Reactor Yield (Box, Hunter, & Hunter)

Design: $2^{**}(5-2)$ ($k=5, n=8$)



Chemical Reactor Yield (Box, Hunter, & Hunter)
Design: $2^{**}(5-2)$ ($k=5, n=8$)

Halfnormal Probability Plot of |Effects|

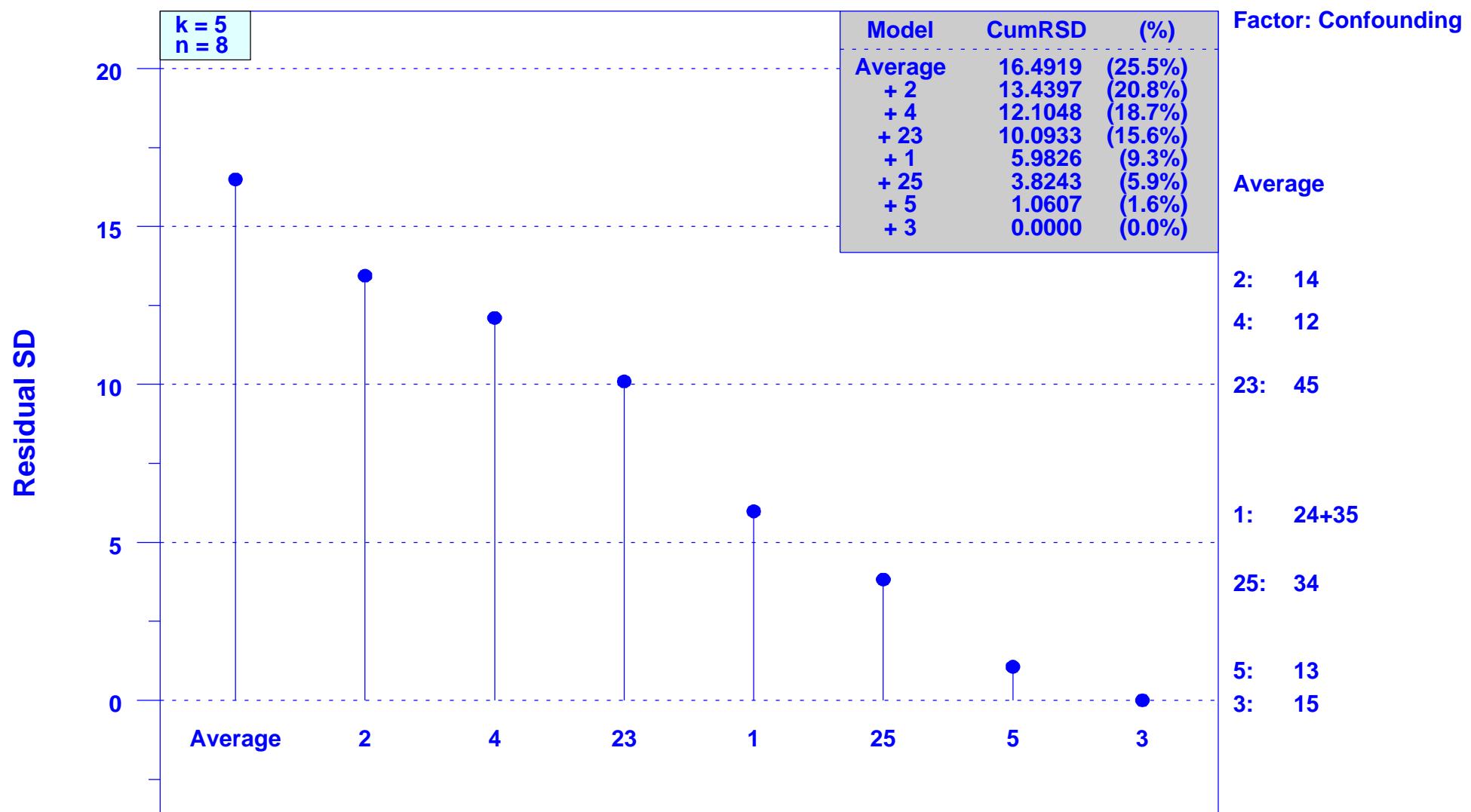


Chemical Reactor Yield (Box, Hunter, & Hunter)

Design: $2^{**}(5-2)$ ($k=5, n=8$)

Cumulative Residual SD Plot

Mean = 64.6250

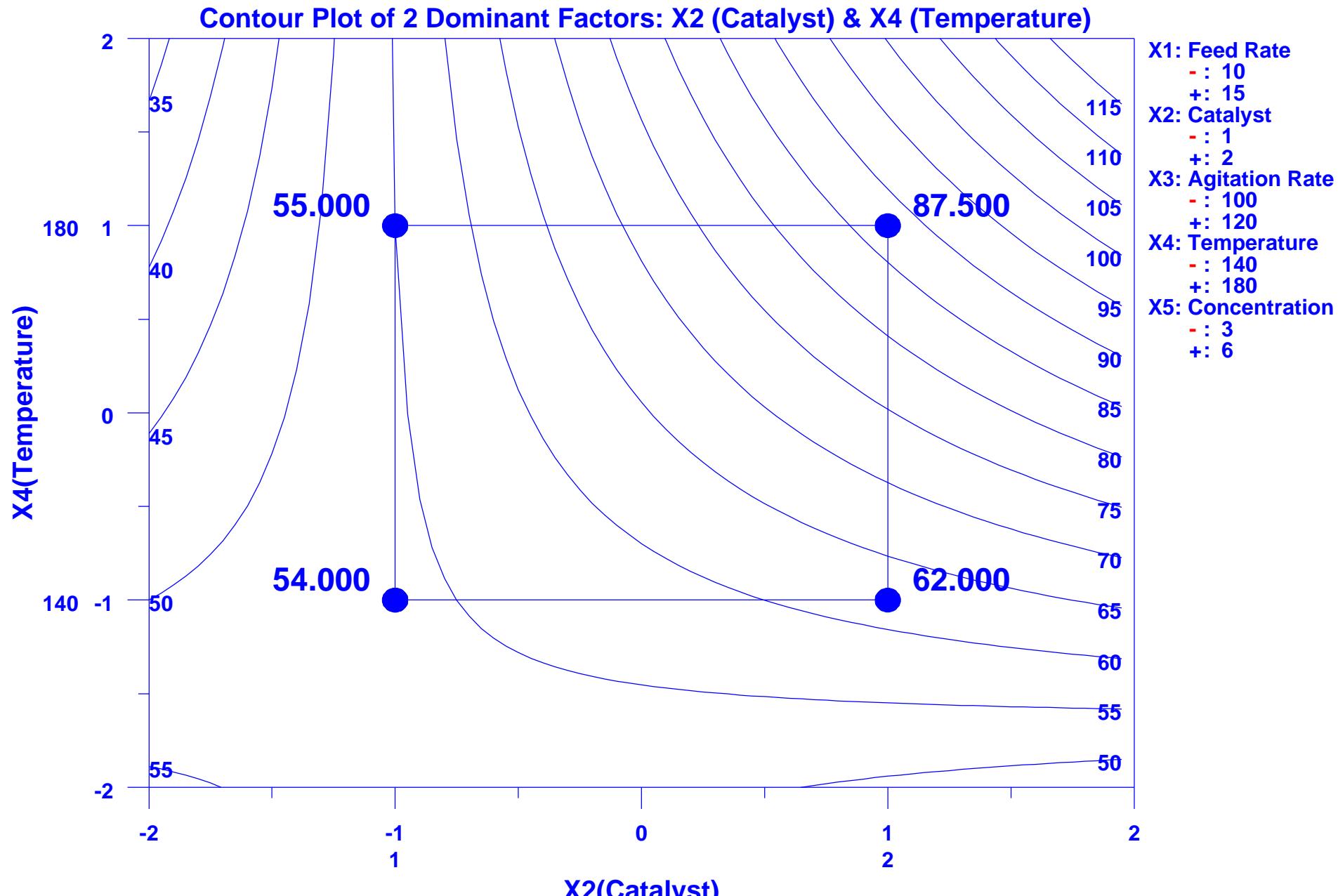


10

Chemical Reactor Yield (Box, Hunter, & Hunter)

Design: $2^{**}(5-2)$ ($k=5, n=8$)

10



Center-Point Predicted Value (From 2-Factor Edge-based Model) = 64.6250