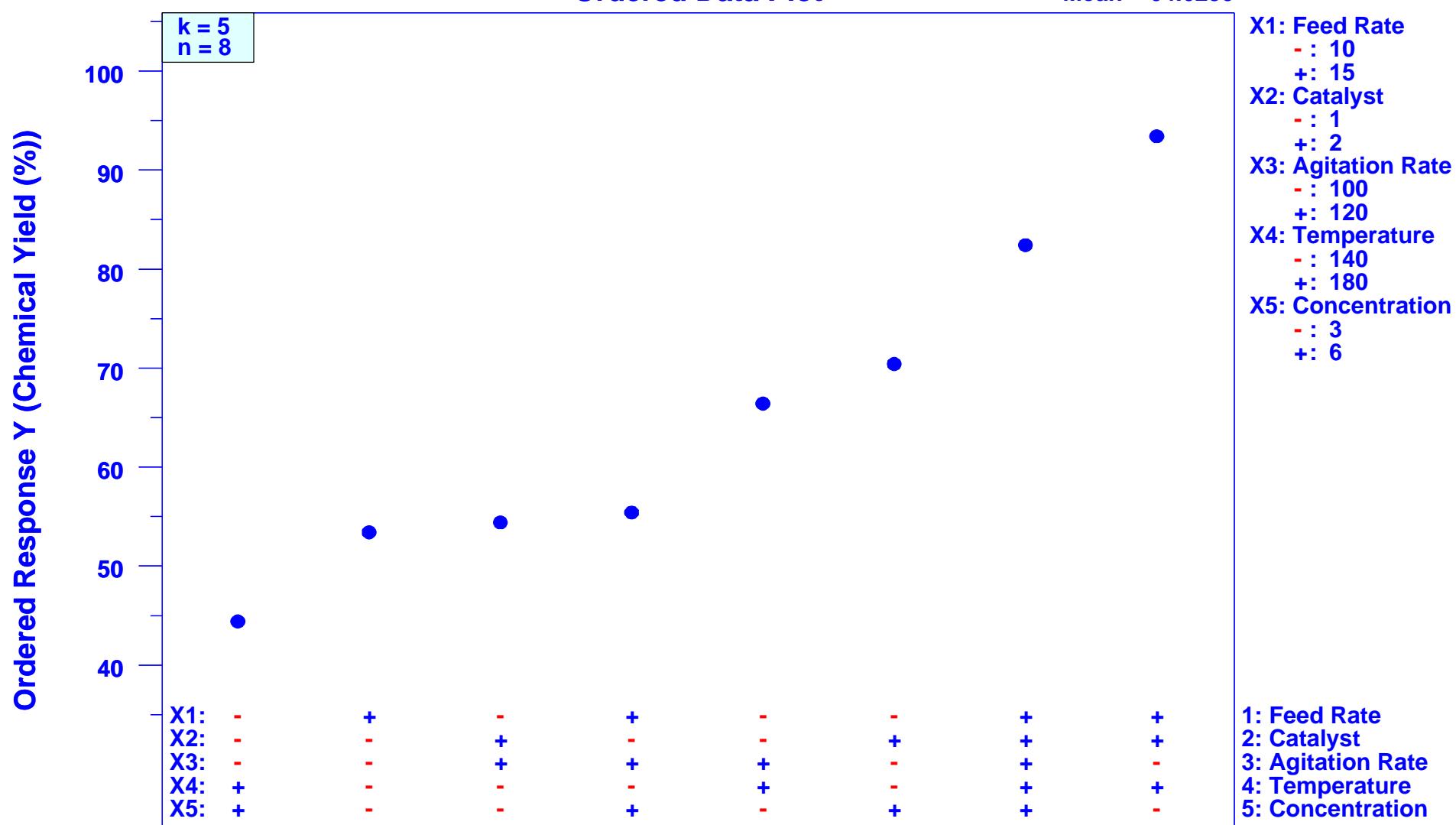


Chemical Reactor Yield (Box, Hunter, & Hunter)
Design: $2^{**}(5-2)$ ($k=5, n=8$)

Ordered Data Plot

Mean = 64.6250

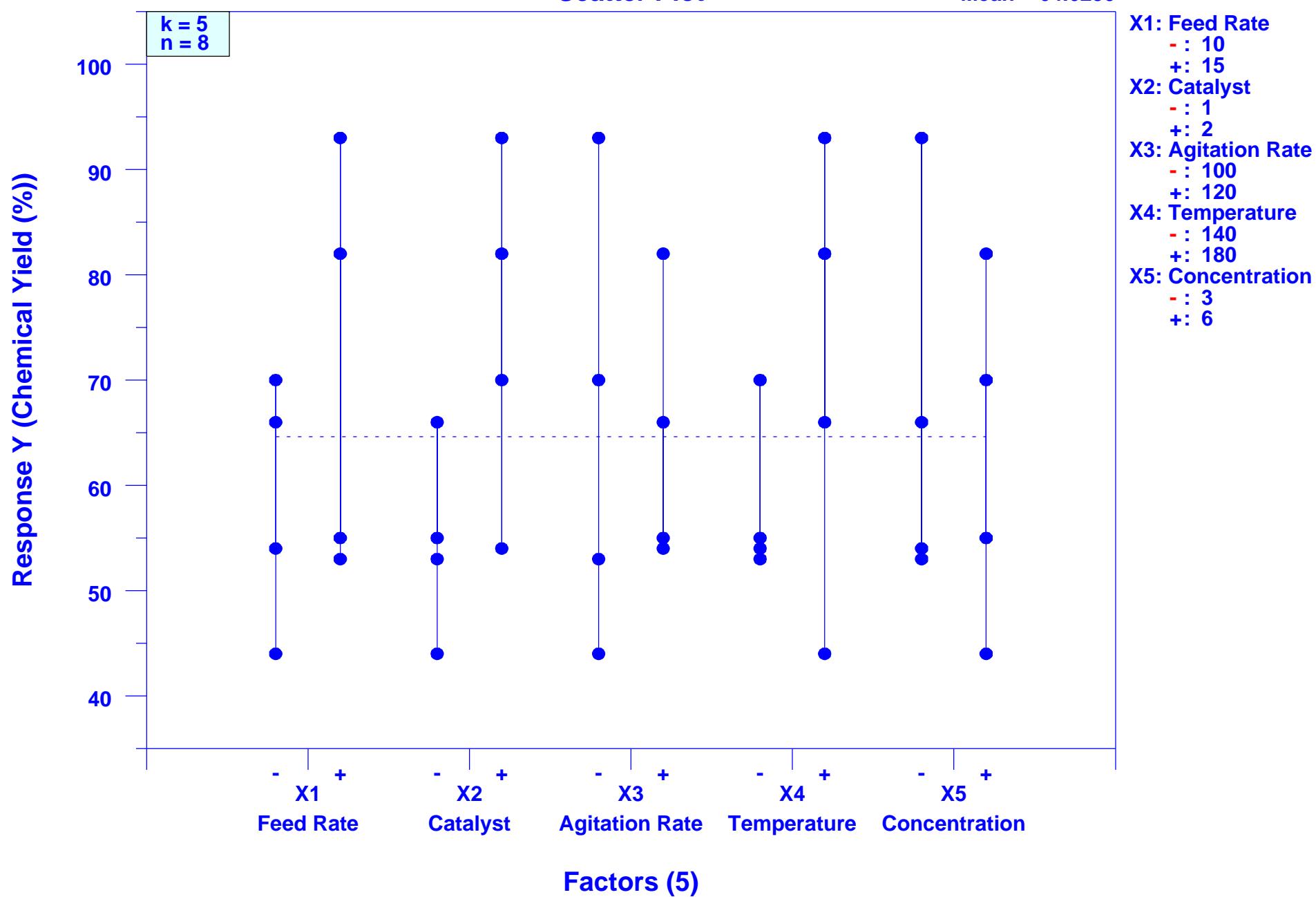


Chemical Reactor Yield (Box, Hunter, & Hunter)

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

Scatter Plot

Mean = 64.6250

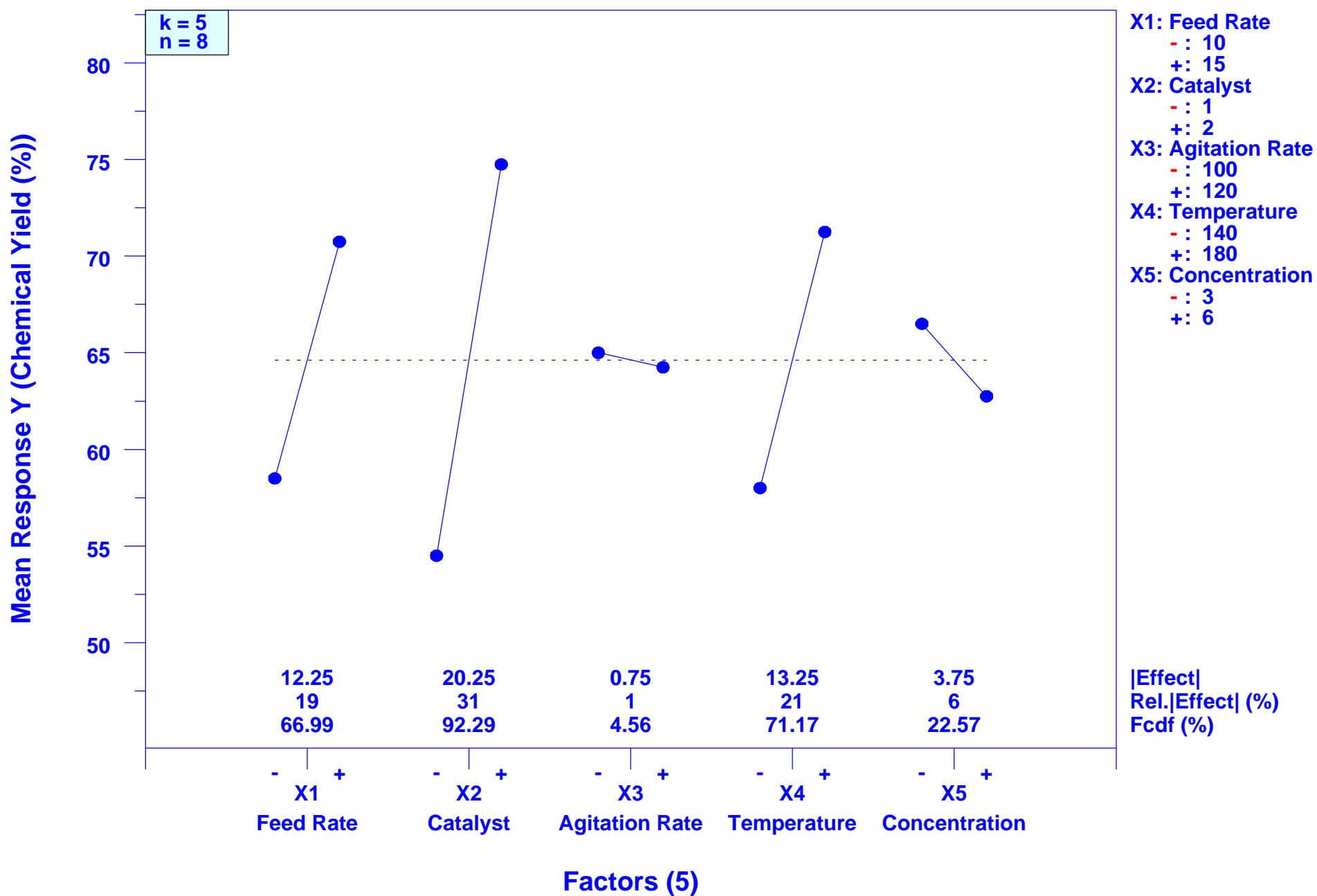


Chemical Reactor Yield (Box, Hunter, & Hunter)

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

Main Effects Plot

Mean = 64.6250

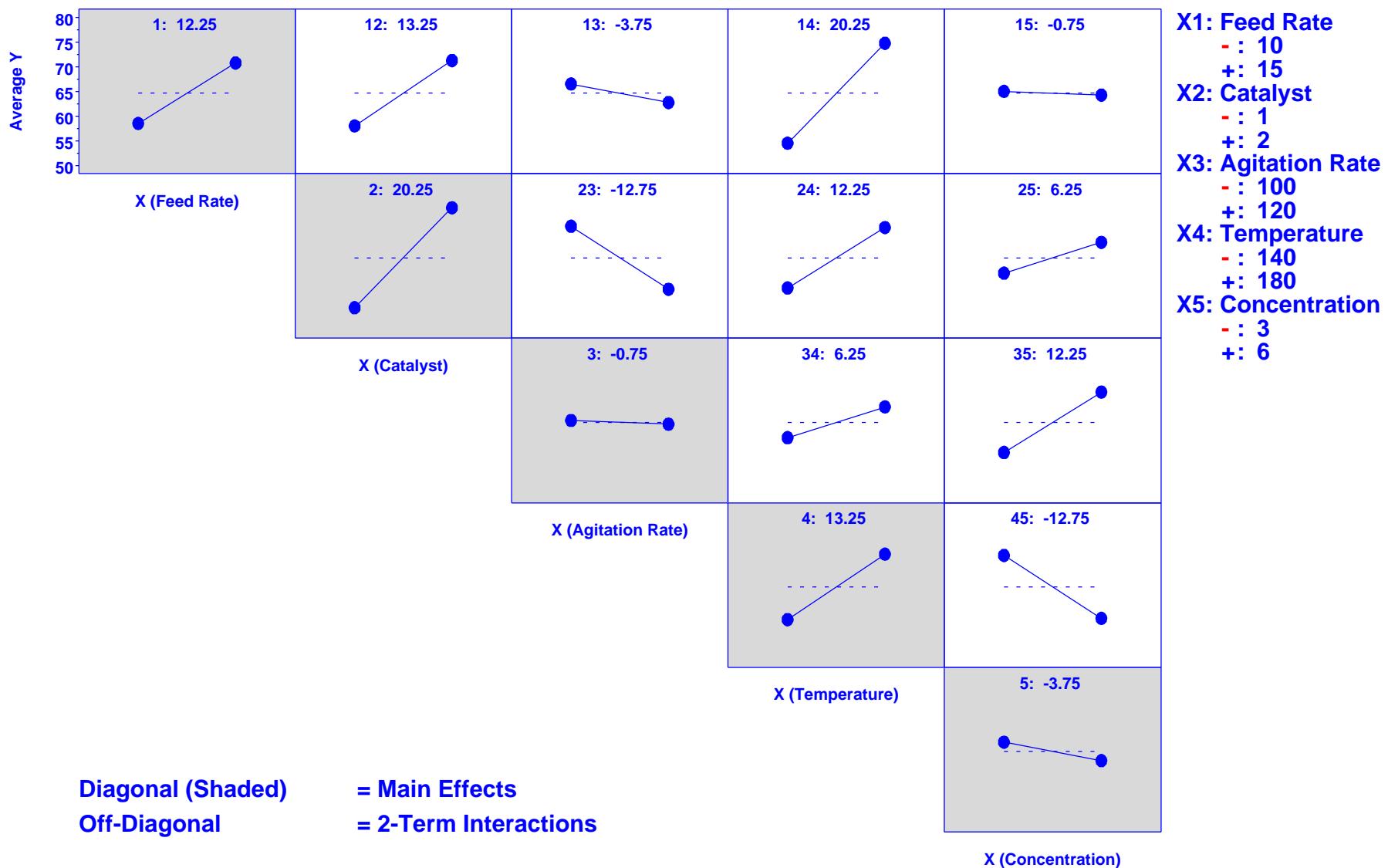


Chemical Reactor Yield (Box, Hunter, & Hunter)

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

Interaction Effects Matrix

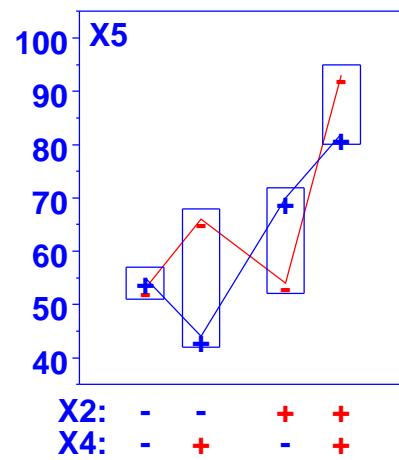
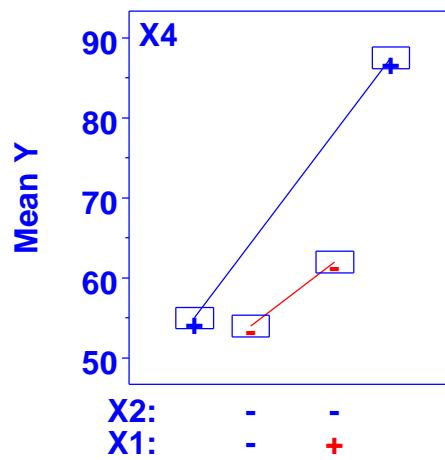
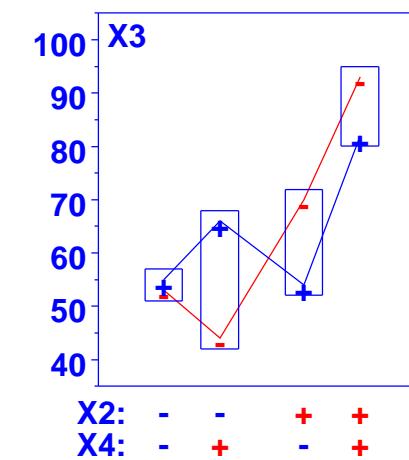
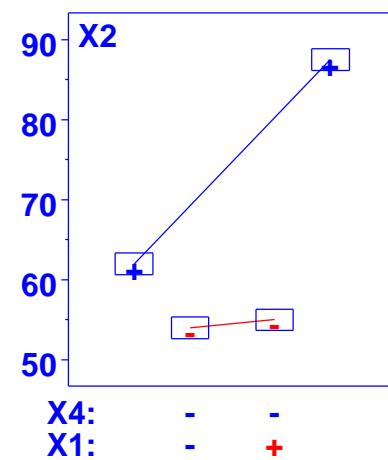
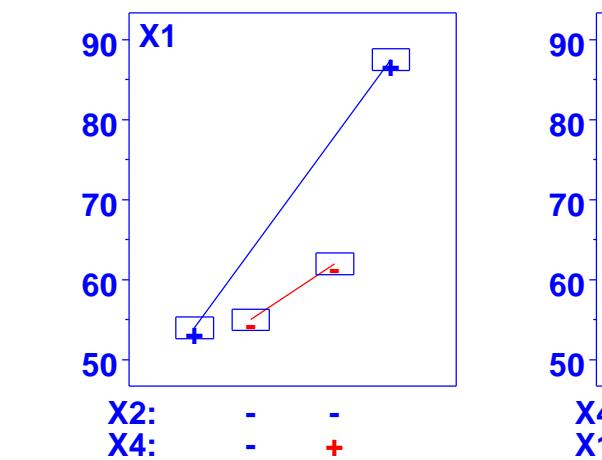
Mean = 64.6250



Chemical Reactor Yield (Box, Hunter, & Hunter)

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

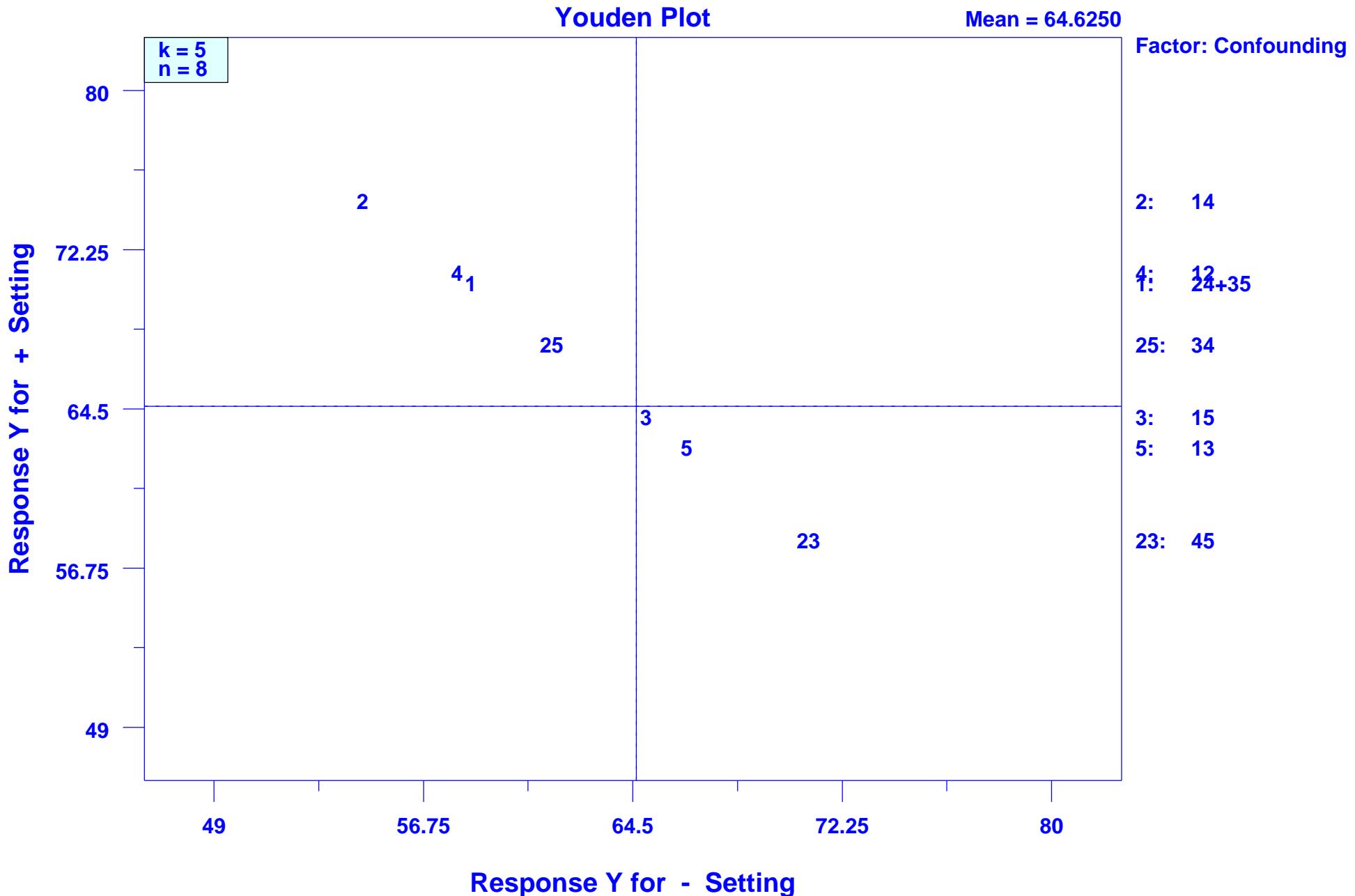
Block Plot



Robustness Factor Setting

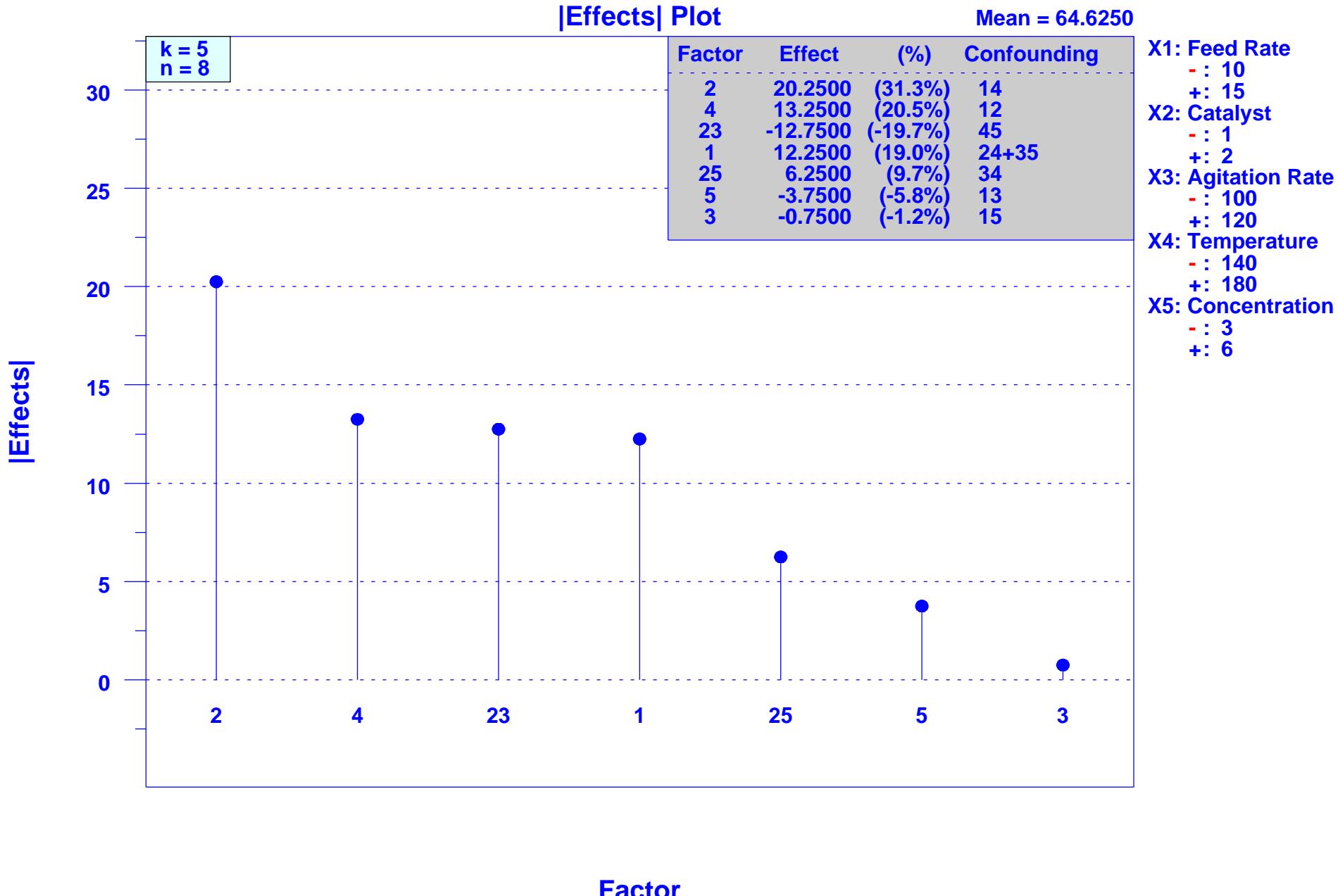
- X1: Feed Rate**
 - : 10
 - +: 15
- X2: Catalyst**
 - : 1
 - +: 2
- X3: Agitation Rate**
 - : 100
 - +: 120
- X4: Temperature**
 - : 140
 - +: 180
- X5: Concentration**
 - : 3
 - +: 6

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



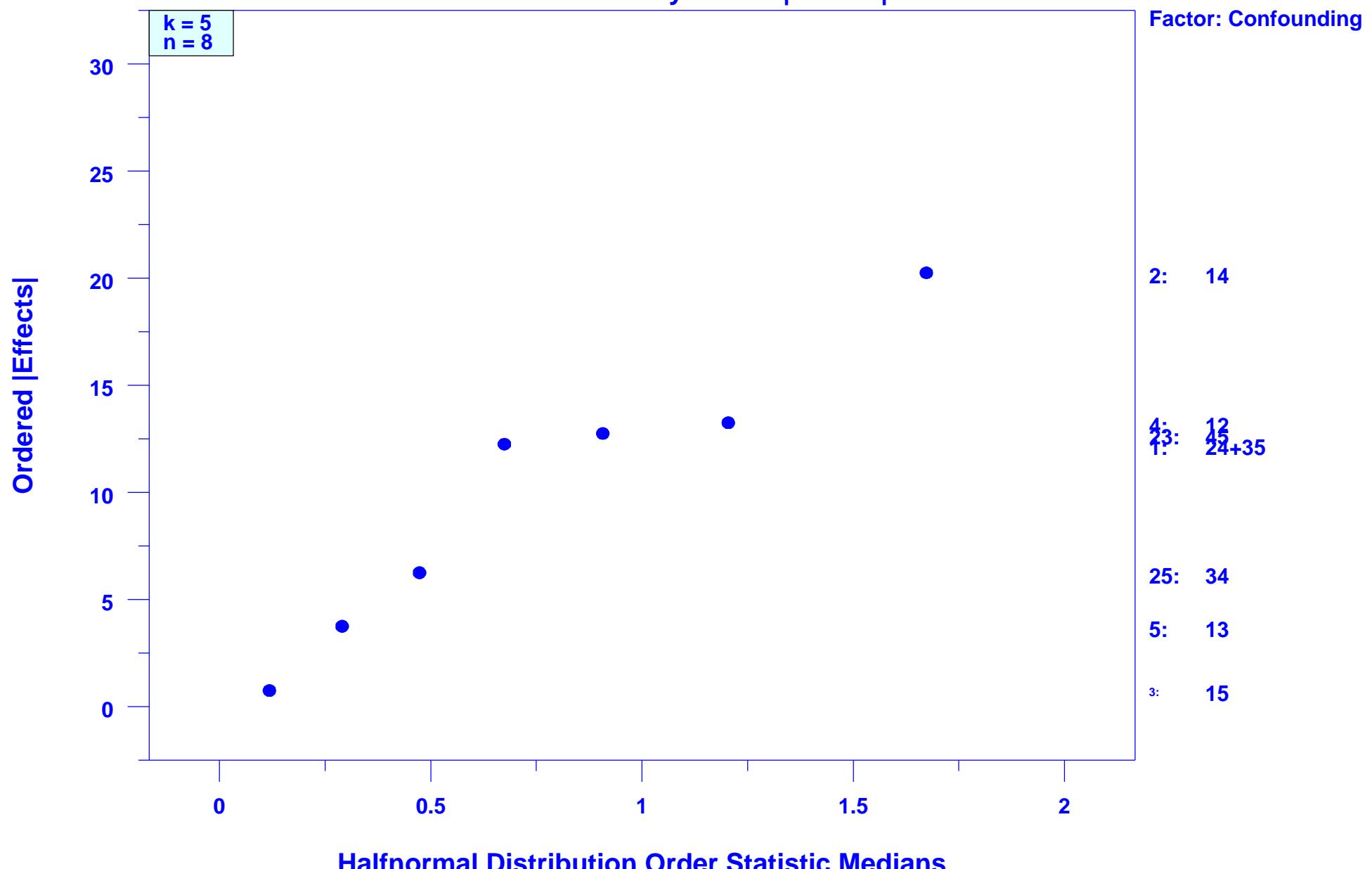
Chemical Reactor Yield (Box, Hunter, & Hunter)

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|

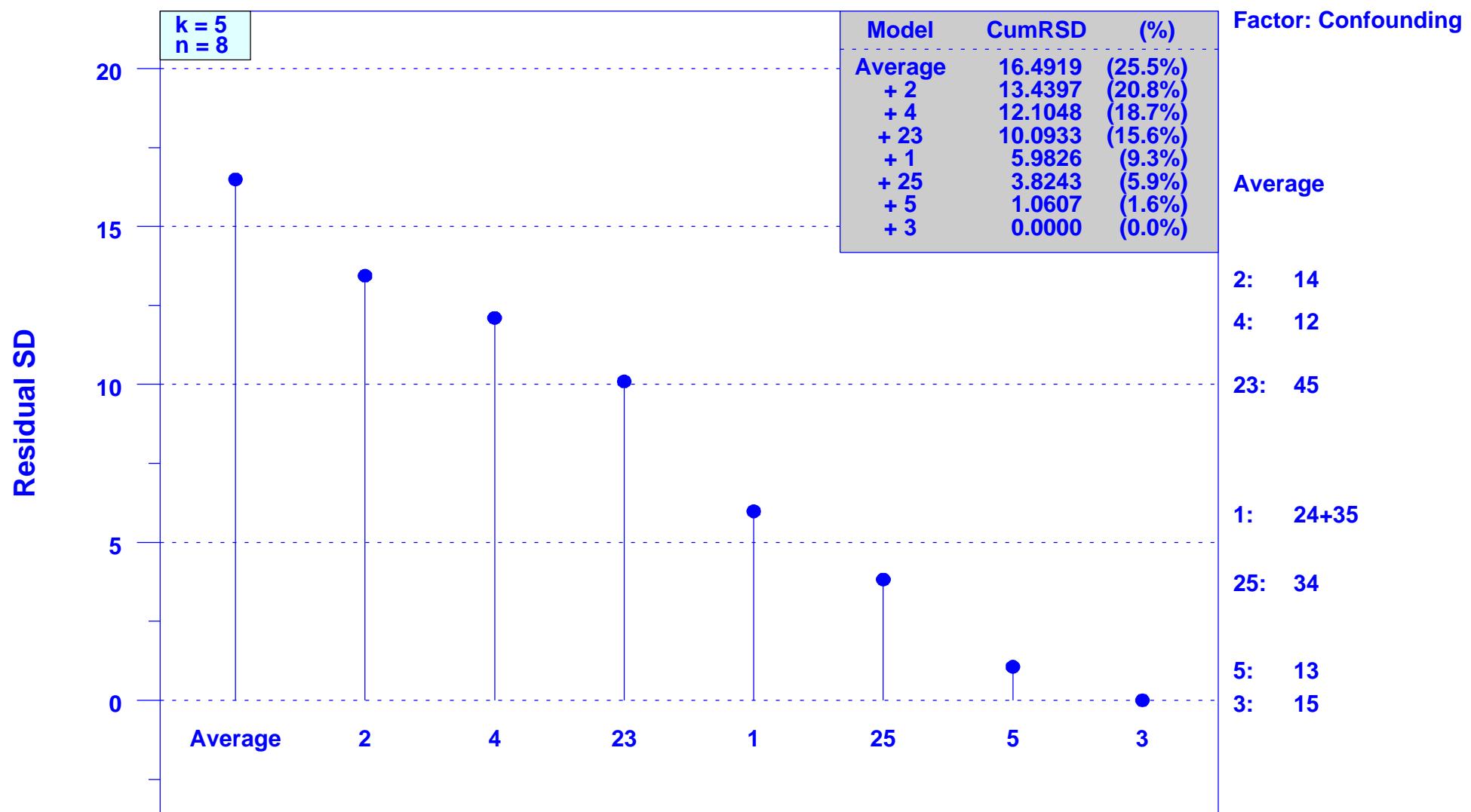


Chemical Reactor Yield (Box, Hunter, & Hunter)

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

Cumulative Residual SD Plot

Mean = 64.6250

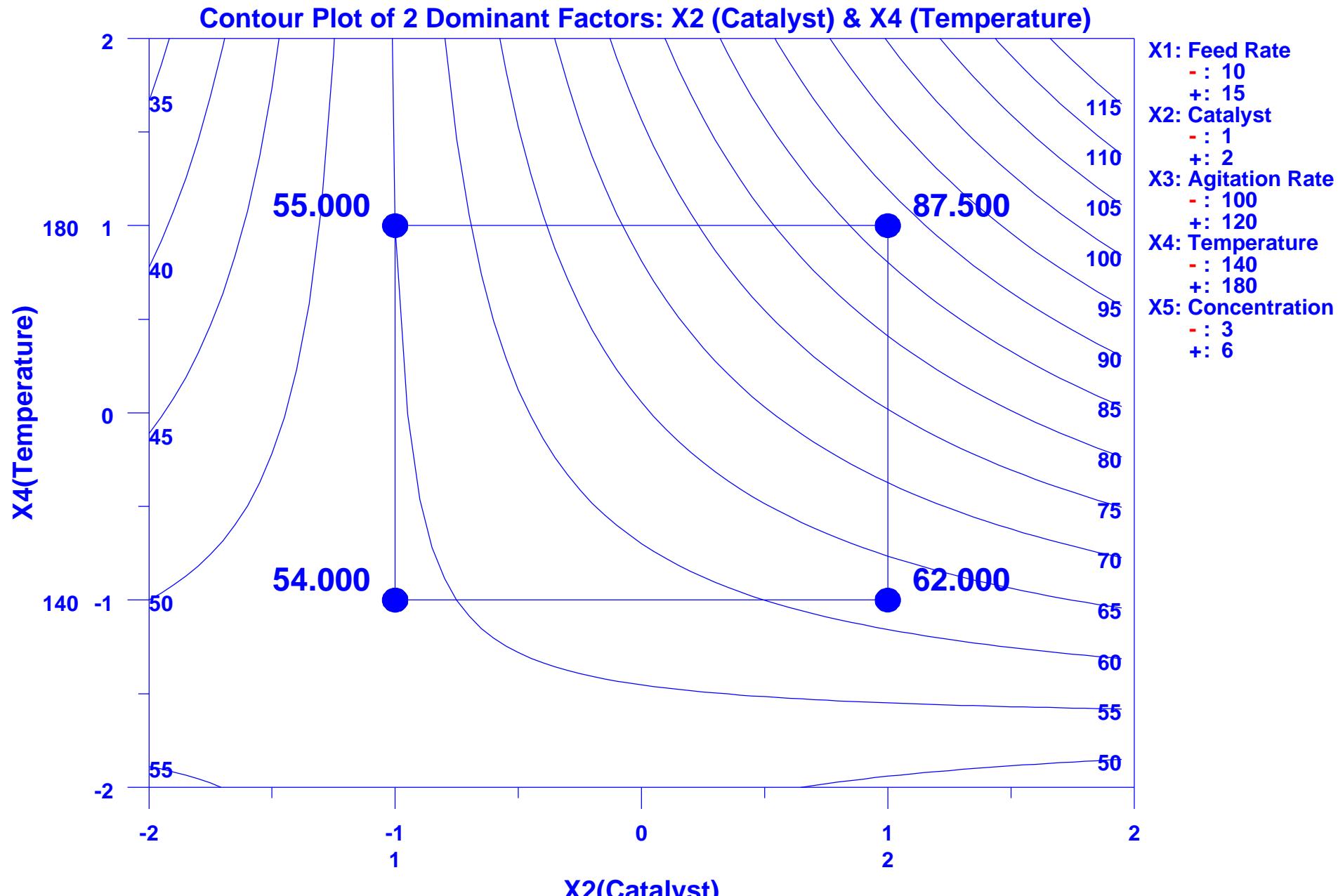


10

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