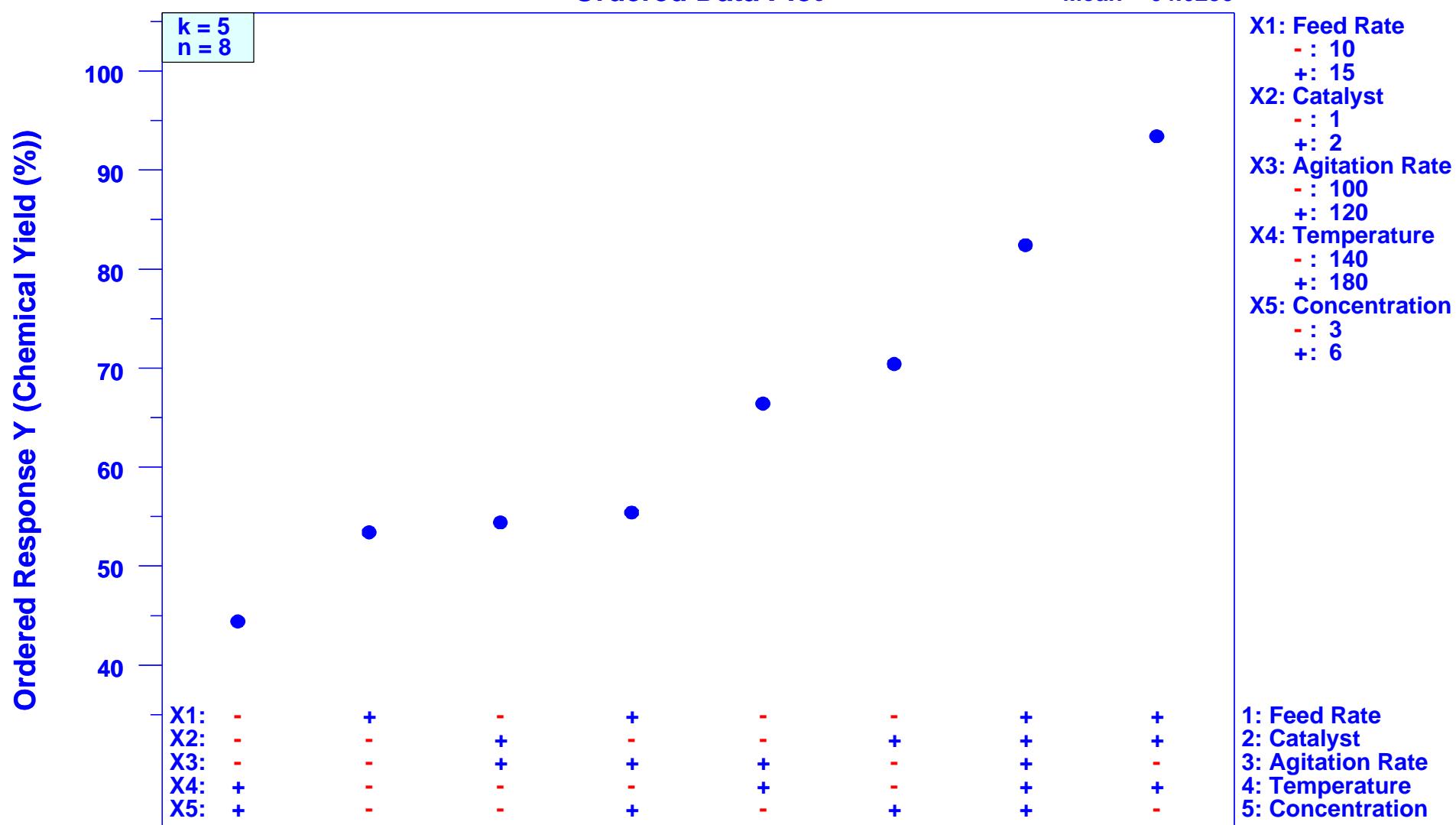


Chemical Reactor Yield (Box, Hunter, & Hunter)  
Design:  $2^{**}(5-2)$  ( $k=5, n=8$ )

Ordered Data Plot

Mean = 64.6250

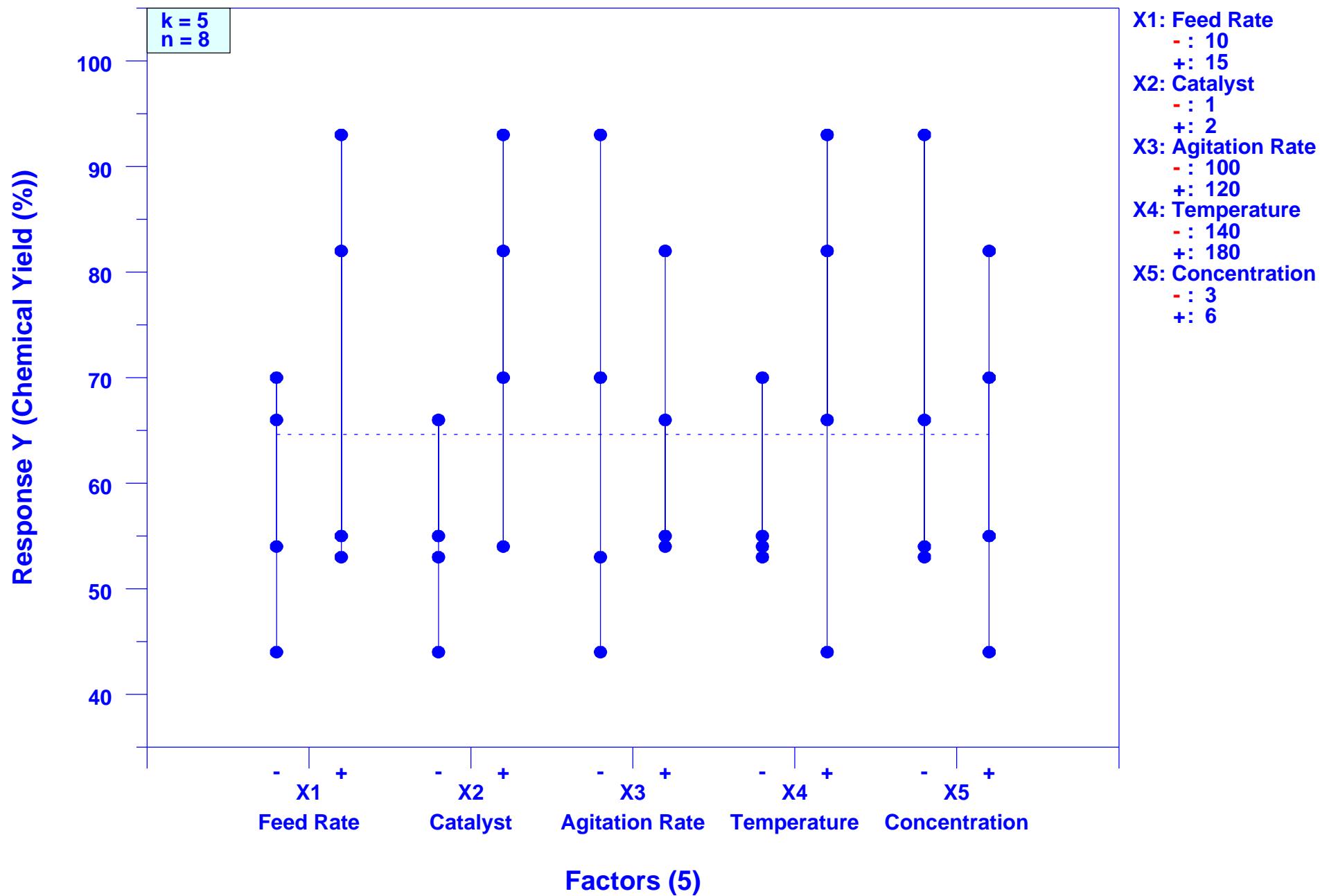


# Chemical Reactor Yield (Box, Hunter, & Hunter)

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

## Scatter Plot

Mean = 64.6250

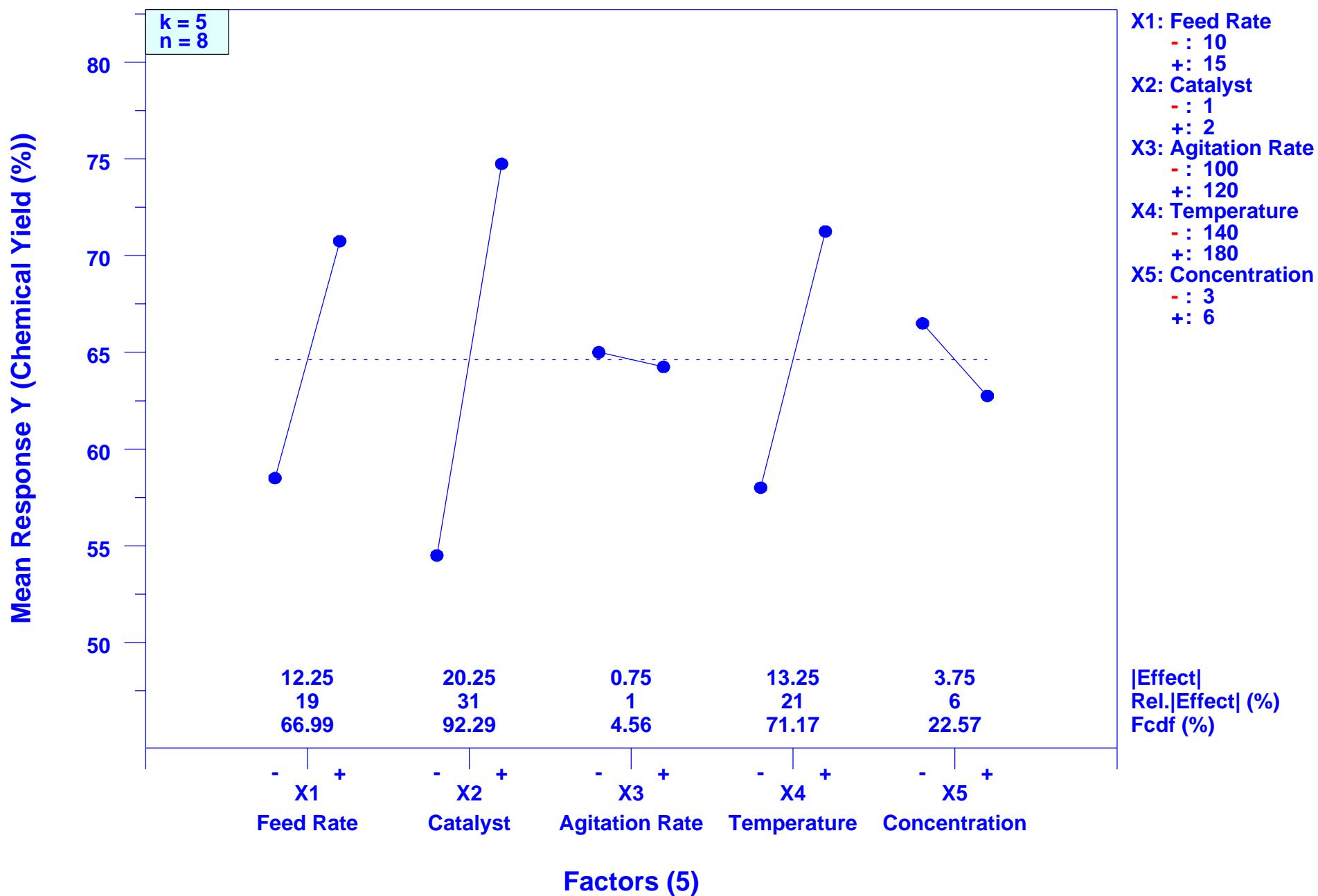


# Chemical Reactor Yield (Box, Hunter, & Hunter)

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

## Main Effects Plot

Mean = 64.6250

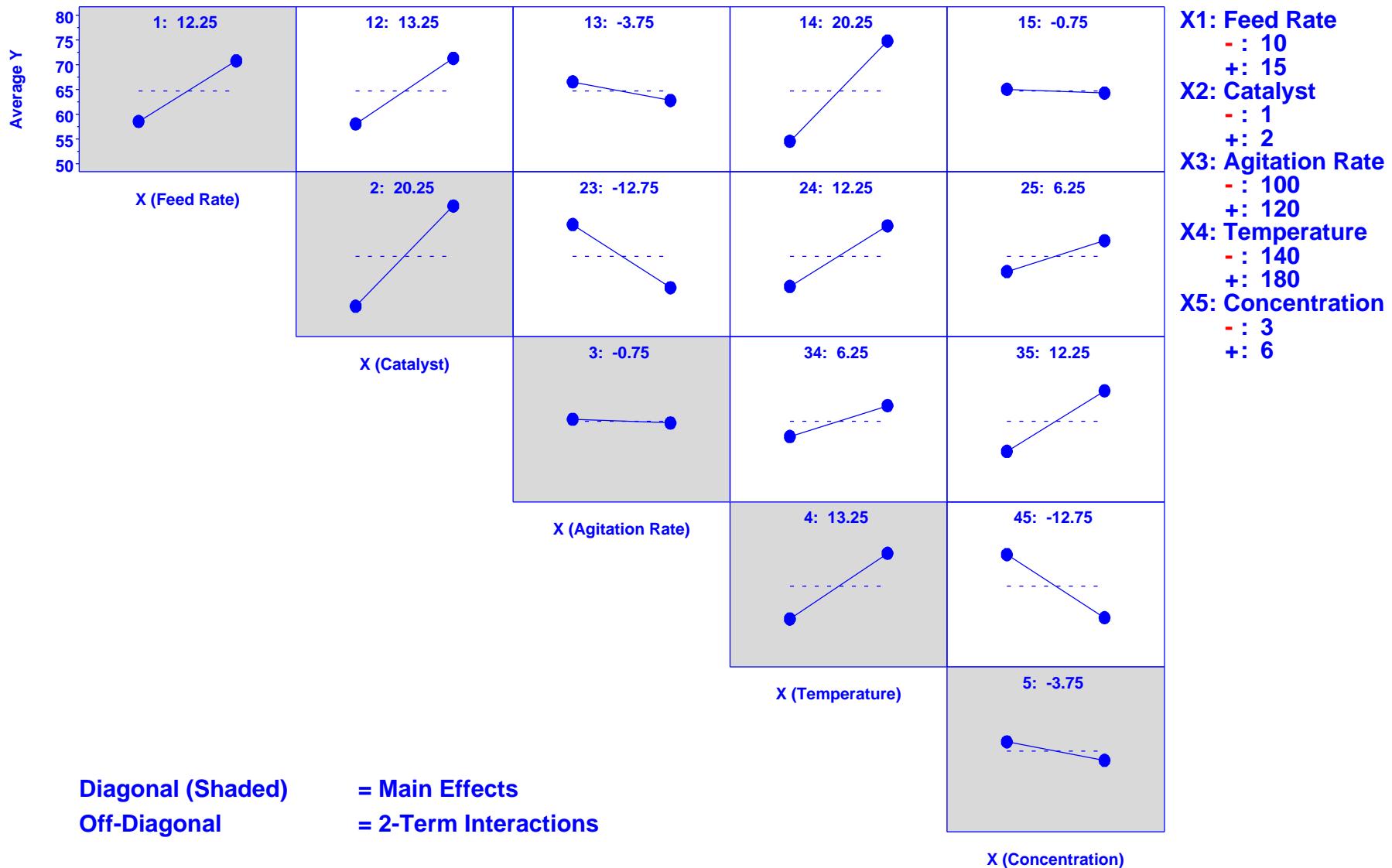


# Chemical Reactor Yield (Box, Hunter, & Hunter)

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

**Interaction Effects Matrix**

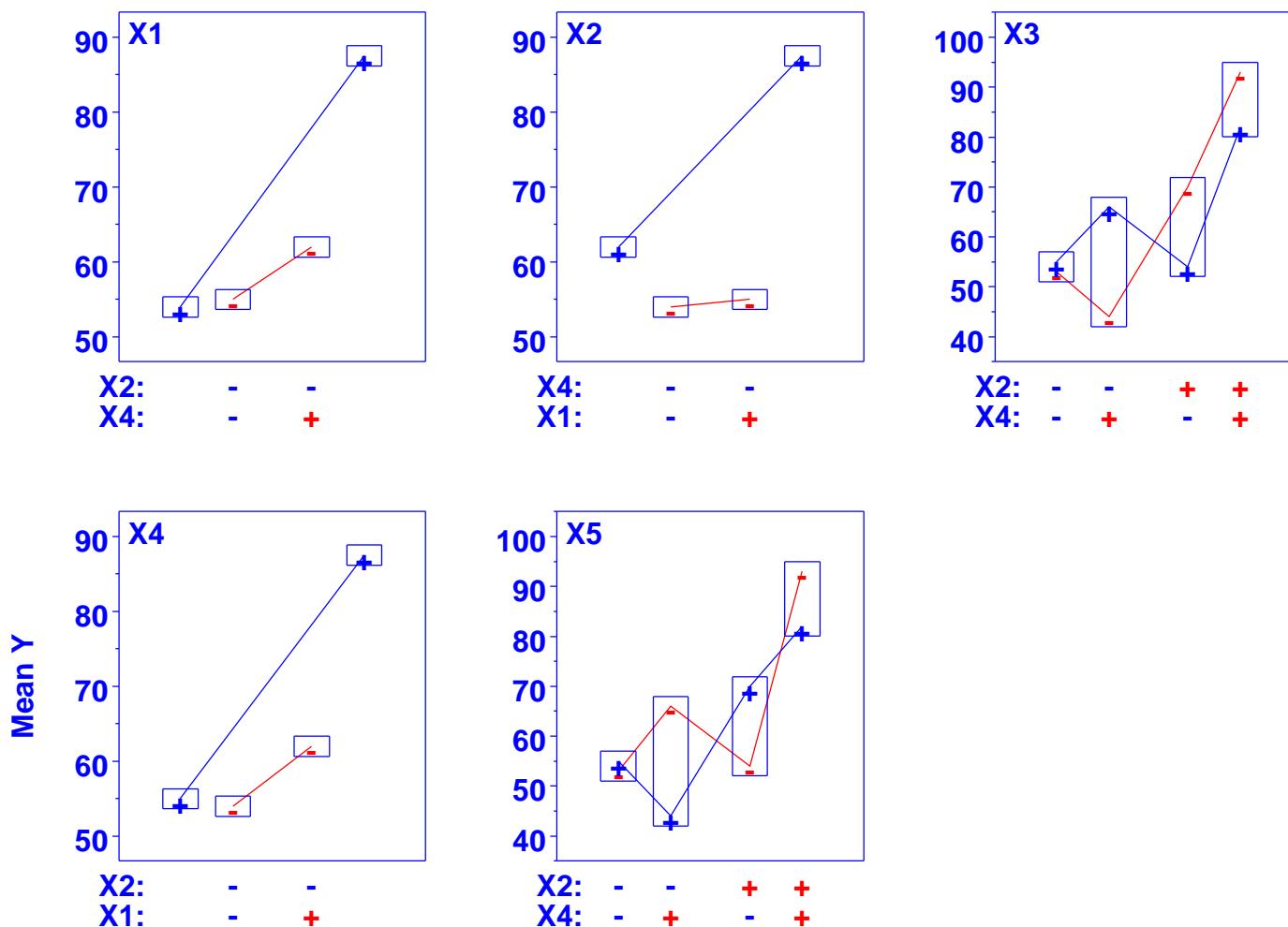
Mean = 64.6250



# Chemical Reactor Yield (Box, Hunter, & Hunter)

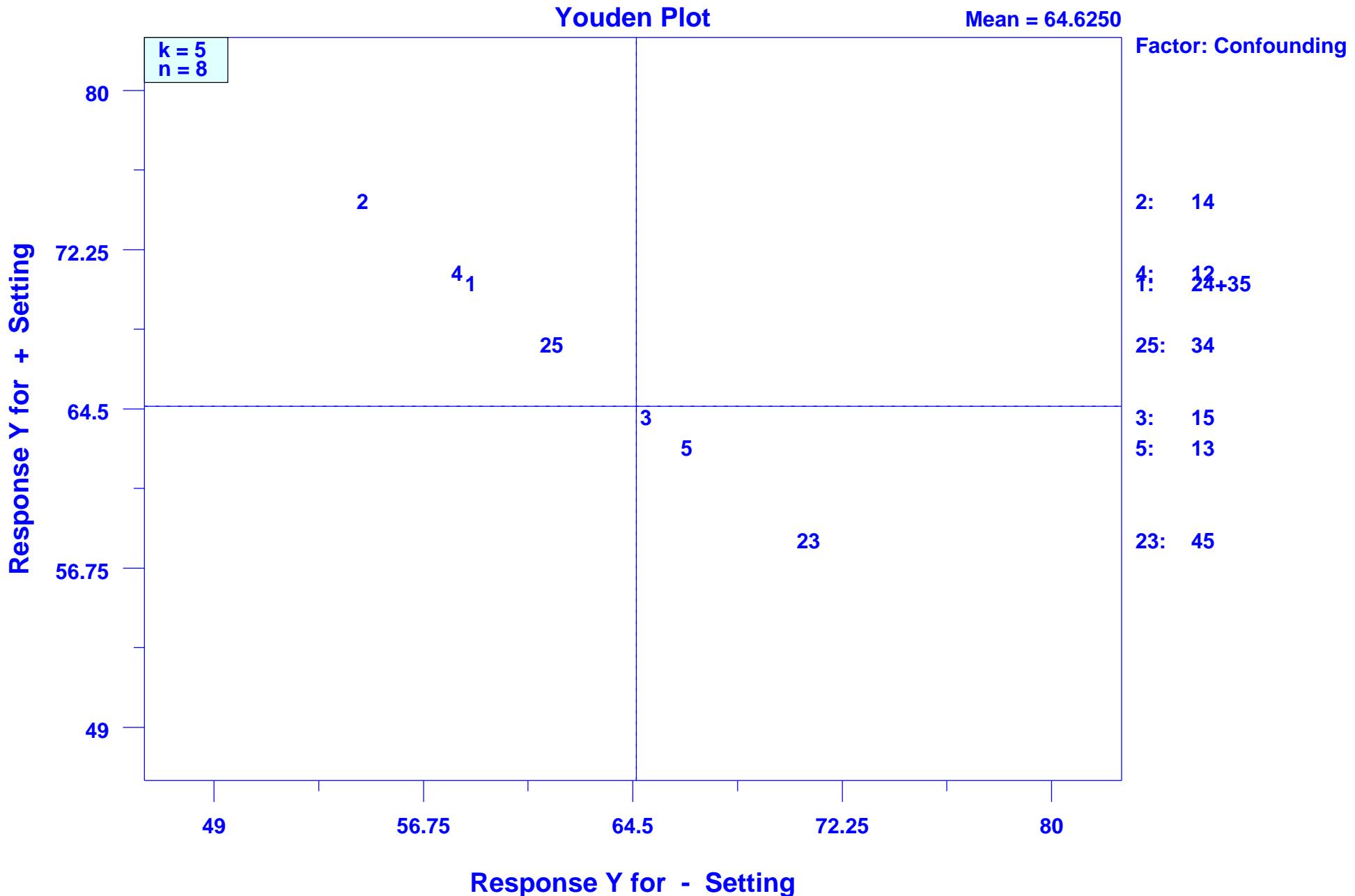
Design:  $2^{**}(5-2)$  ( $k=5, n=8$ )

## Block Plot



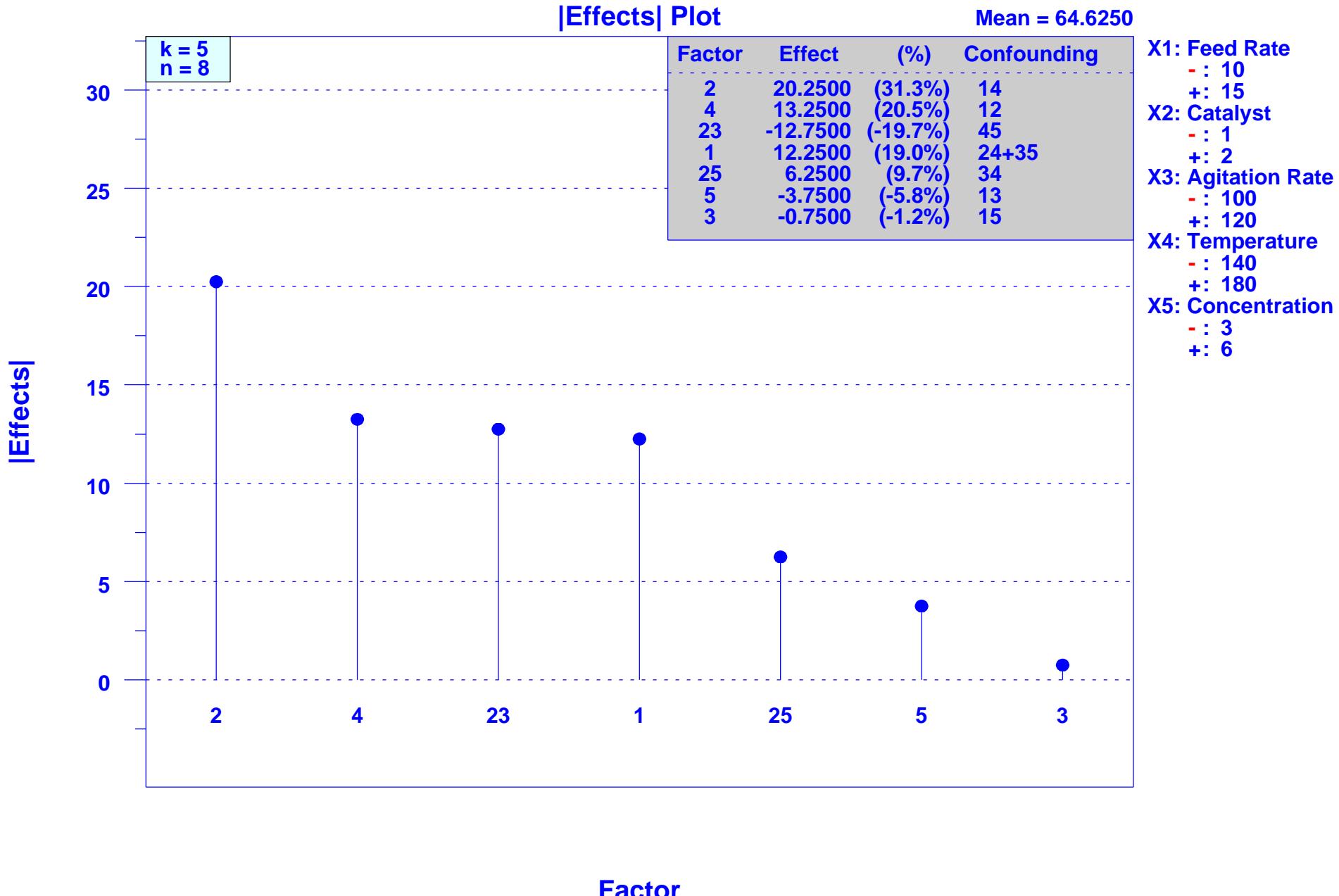
**Robustness Factor Setting**

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



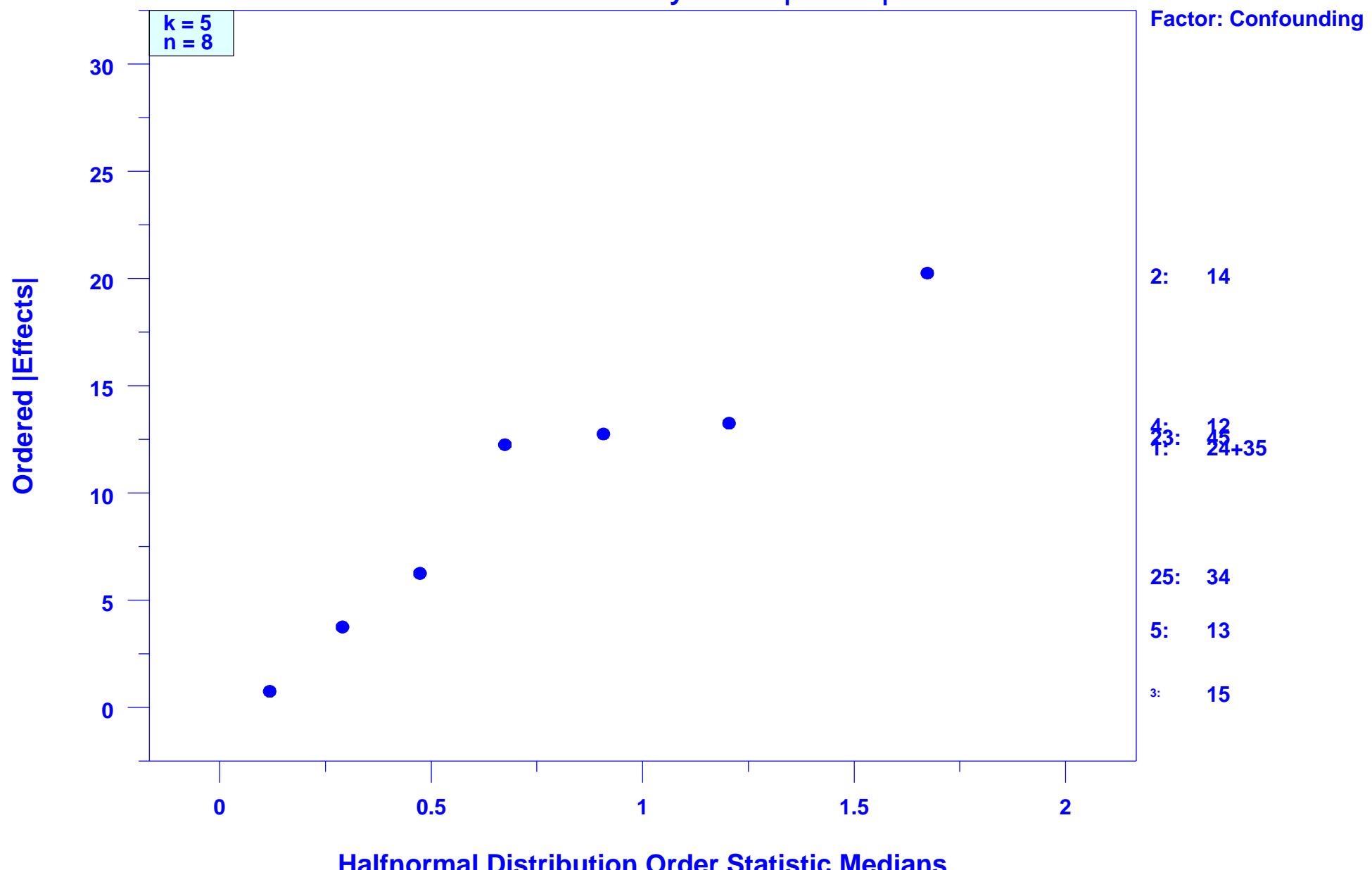
# Chemical Reactor Yield (Box, Hunter, & Hunter)

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|

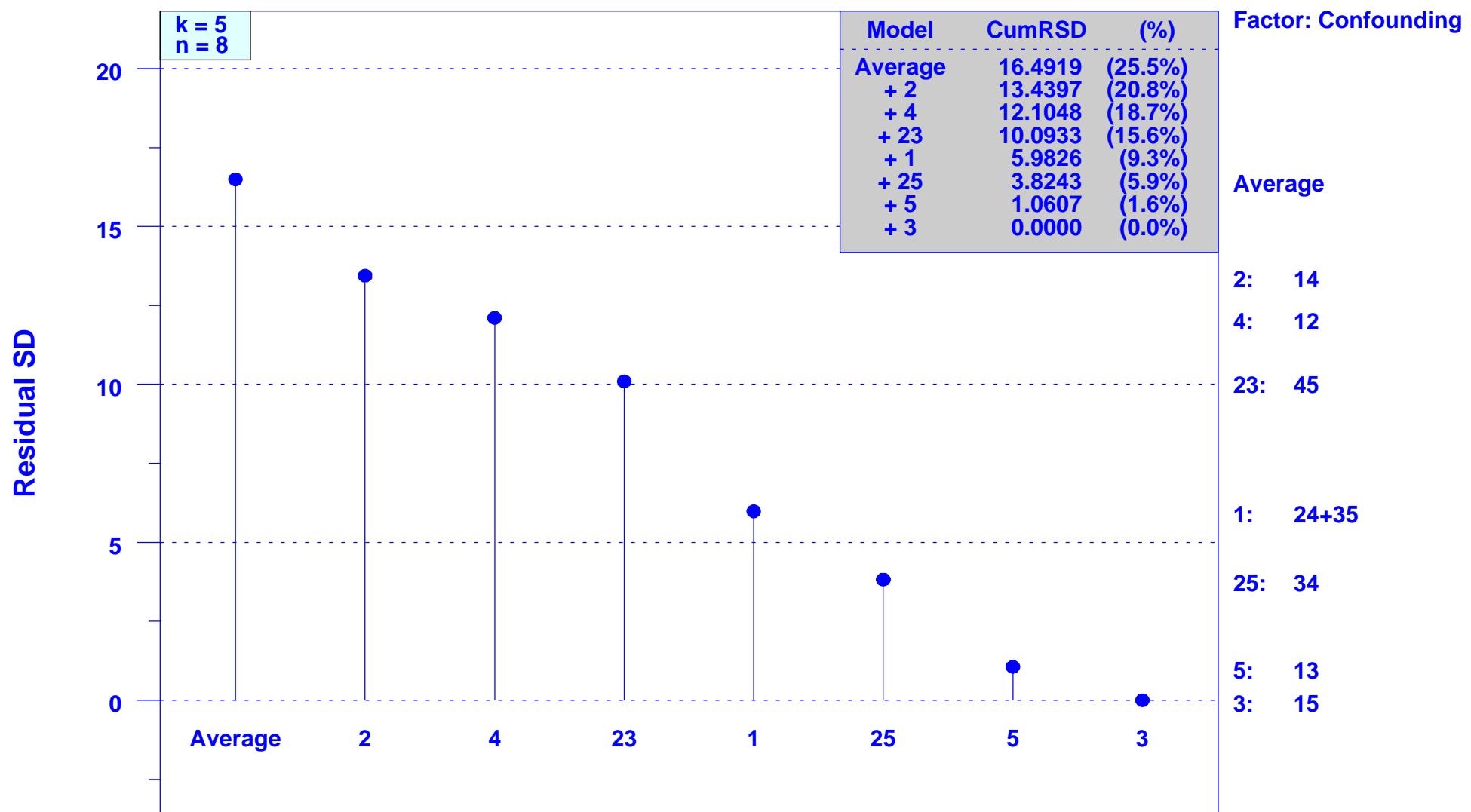


# Chemical Reactor Yield (Box, Hunter, & Hunter)

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

## Cumulative Residual SD Plot

Mean = 64.6250

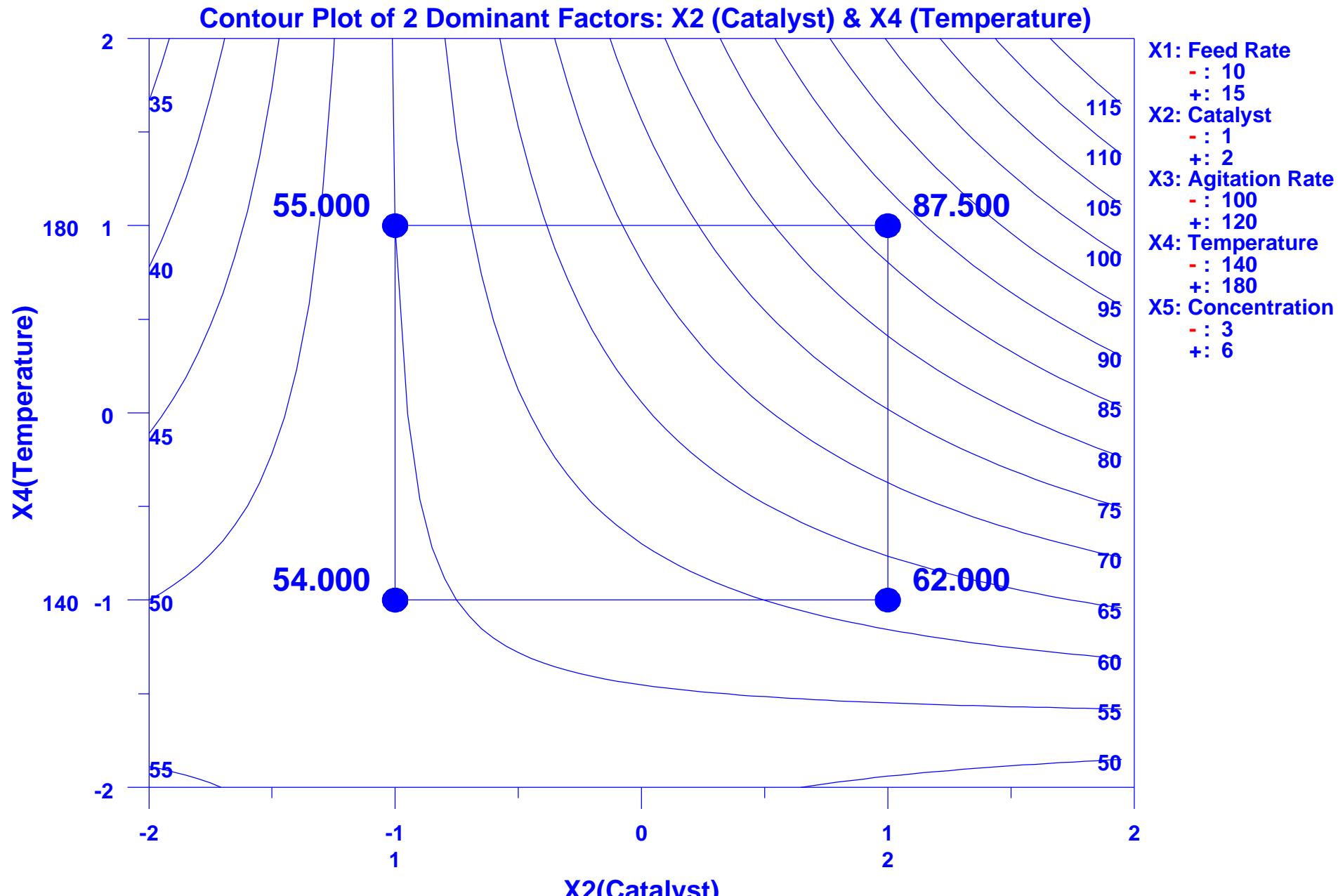


10

# 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