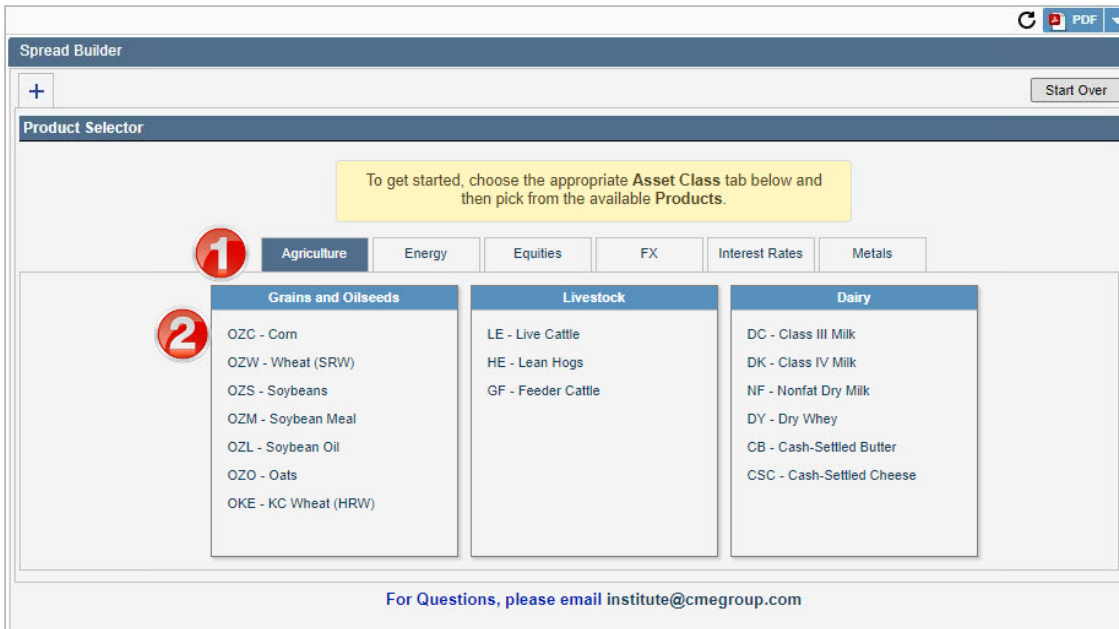


Build a Strategy

OPTIONS AND FUTURES

1. Select **Asset Class**
2. Select desired **Product**



The screenshot shows the 'Spread Builder' application window. At the top, there's a 'Product Selector' tab. A yellow instruction box says: 'To get started, choose the appropriate Asset Class tab below and then pick from the available Products.' Below this, there are six tabs: Agriculture, Energy, Equities, FX, Interest Rates, and Metals. The 'Agriculture' tab is selected and highlighted with a red circle and the number '1'. Under the 'Agriculture' tab, there are three sub-sections: 'Grains and Oilseeds', 'Livestock', and 'Dairy'. The 'Grains and Oilseeds' section is highlighted with a red circle and the number '2'. It contains a list of products: OZC - Corn, OZW - Wheat (SRW), OZS - Soybeans, OZM - Soybean Meal, OZL - Soybean Oil, OZO - Oats, and OKE - KC Wheat (HRW). The 'Livestock' section contains: LE - Live Cattle, HE - Lean Hogs, and GF - Feeder Cattle. The 'Dairy' section contains: DC - Class III Milk, DK - Class IV Milk, NF - Nonfat Dry Milk, DY - Dry Whey, CB - Cash-Settled Butter, and CSC - Cash-Settled Cheese. At the bottom, there is a link: 'For Questions, please email institute@cmegroup.com'.

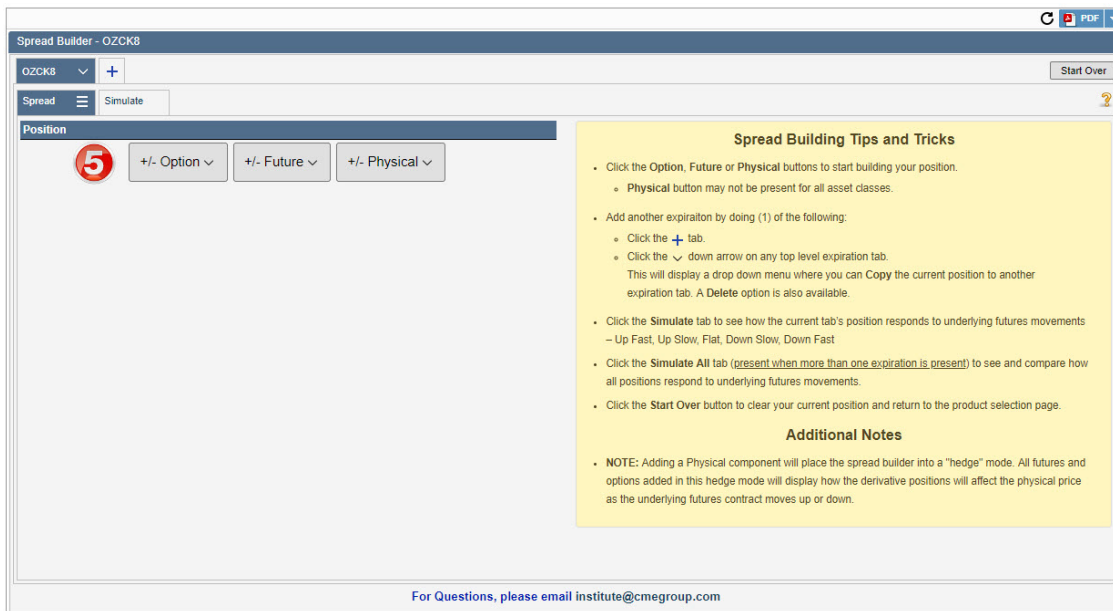
3. Select the Contract Expiration (expirations will vary by product).
4. Click **OK**.



The screenshot shows the 'Spread Builder' application window, now on the 'Expiration Selector' tab. A yellow instruction box says: 'To begin building a Corn spread select a contract below and then click the OK button.' Below this, there are five columns of contract expirations: Jan-Dec18, Jan-Dec19, Weeklies, SD-Jan-Dec18, and SD-Jan-Dec19. The 'Jan-Dec18' column is highlighted with a red circle and the number '3'. It contains a list of contracts: Mar18 [23-Feb18], Apr18 [23-Mar18], May18 [20-Apr18] (selected with a radio button), Jul18 [22-Jun18], Sep18 [24-Aug18], and Dec18 [23-Nov18]. The 'Weeklies' column contains: Feb18 [16-Feb18], Mar18 [02-Mar18], and Mar18 [09-Mar18]. The 'SD-Jan-Dec18' column contains: Mar18 [23-Feb18], Apr18 [23-Mar18], May18 [20-Apr18], Jun18 [25-May18], Jul18 [22-Jun18], Aug18 [27-Jul18], and Sep18 [24-Aug18]. The 'SD-Jan-Dec19' column contains: Jan19 [21-Dec18], Feb19 [25-Jan19], Mar19 [22-Feb19], Apr19 [22-Mar19], May19 [26-Apr19], Jun19 [24-May19], Jul19 [21-Jun19], Aug19 [26-Jul19], and Sep19 [23-Aug19]. At the bottom, there is a red circle with the number '4' and an 'OK' button. At the bottom, there is a link: 'For Questions, please email institute@cmegroup.com'.

This screen allows you to build a spread using any combination of options, futures, or physical positions.

5. Click the dropdown arrow to add the desired instrument



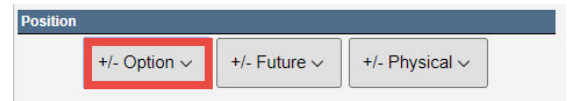
Option – allows users to enter an option position

Future – allows users to enter a futures position

Physical – allows users to enter an existing cash position and build option and future hedges around the cash position

Building an Options Strategy

5. Select **Option** from the Spread Builder screen



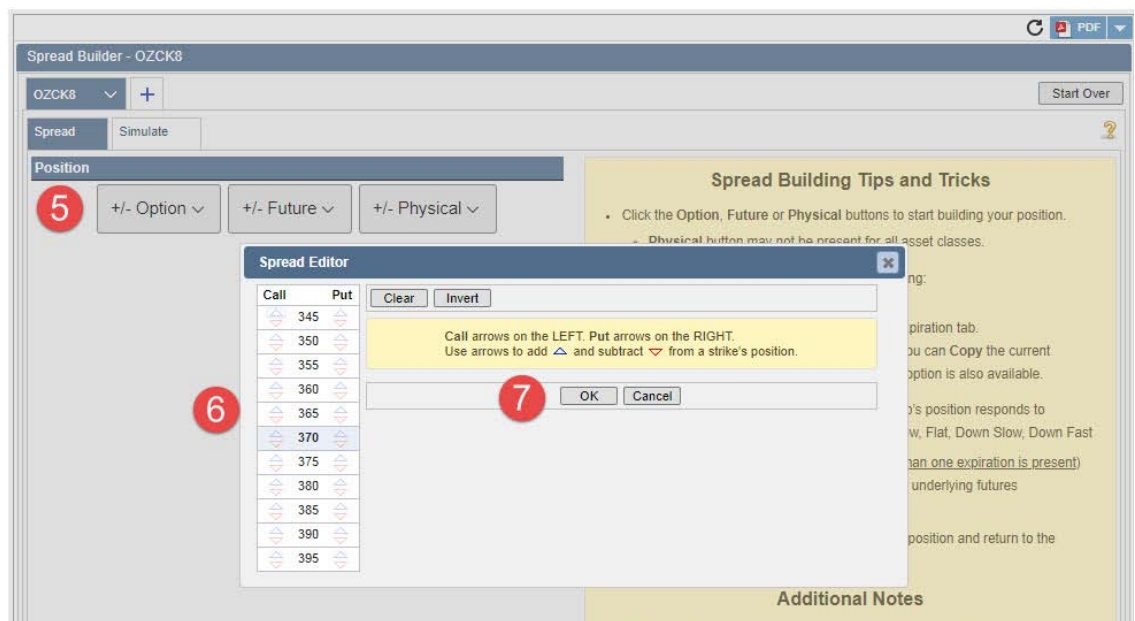
6. Select the desired strike price(s)

Call arrows on the left. **Put** arrows on the right.

Use up arrows to add to the position

Use down arrow to subtract from the position

7. Click **OK**



Building a Futures Strategy

5. Select **Future** from the Spread Builder screen

6. Enter the Quantity and Futures price

Positive quantity indicates Long position

Negative quantity indicates Short position

7. Click **OK**

Spread Builder - OZCK8

OZCK8 +

Spread Simulate

Position

5 +/- Option +/- Future +/- Physical

6 1.0 Futures @ 375.75

7 OK Clear Future

Start Over

Spread Building Tips and Tricks

- Click the Option, Future or Physical buttons to start building your position.
 - Physical button may not be present for all asset classes.
- Add another expiration by doing (1) of the following:
 - Click the + tab.
 - Click the v down arrow on any top level expiration tab. This will display a drop down menu where you can Copy the current position to another expiration tab. A Delete option is also available.
- Click the Simulate tab to see how the current tab's position responds to underlying futures movements – Up Fast, Up Slow, Flat, Down Slow, Down Fast
- Click the Simulate All tab (present when more than one expiration is present) to see and compare how all positions respond to underlying futures movements.
- Click the Start Over button to clear your current position and return to the product selection page.

Additional Notes

- NOTE: Adding a Physical component will place the spread builder into a "hedge" mode. All futures and options added in this hedge mode will display how the derivative positions will affect the physical price as the underlying futures contract moves up or down.

For Questions, please email institute@cmegroup.com

Building a Physical Position

5. Select **Physical** from the Spread Builder screen

6. Enter the Quantity and Physical price

Positive quantity indicates Long position

Negative quantity indicates Short position

7. Click **OK**

Clear Physical will close the dialog box

Spread Builder - OZCK8

OZCK8 +

Spread Simulate

Position

5 +/- Option +/- Future +/- Physical

6 1 Physical @ 375.75

7 OK Clear Physical

Start Over

Spread Building Tips and Tricks

- Click the Option, Future or Physical buttons to start building your position.
 - Physical button may not be present for all asset classes.
- Add another expiration by doing (1) of the following:
 - Click the + tab.
 - Click the v down arrow on any top level expiration tab. This will display a drop down menu where you can Copy the current position to another expiration tab. A Delete option is also available.
- Click the Simulate tab to see how the current tab's position responds to underlying futures movements – Up Fast, Up Slow, Flat, Down Slow, Down Fast
- Click the Simulate All tab (present when more than one expiration is present) to see and compare how all positions respond to underlying futures movements.
- Click the Start Over button to clear your current position and return to the product selection page.

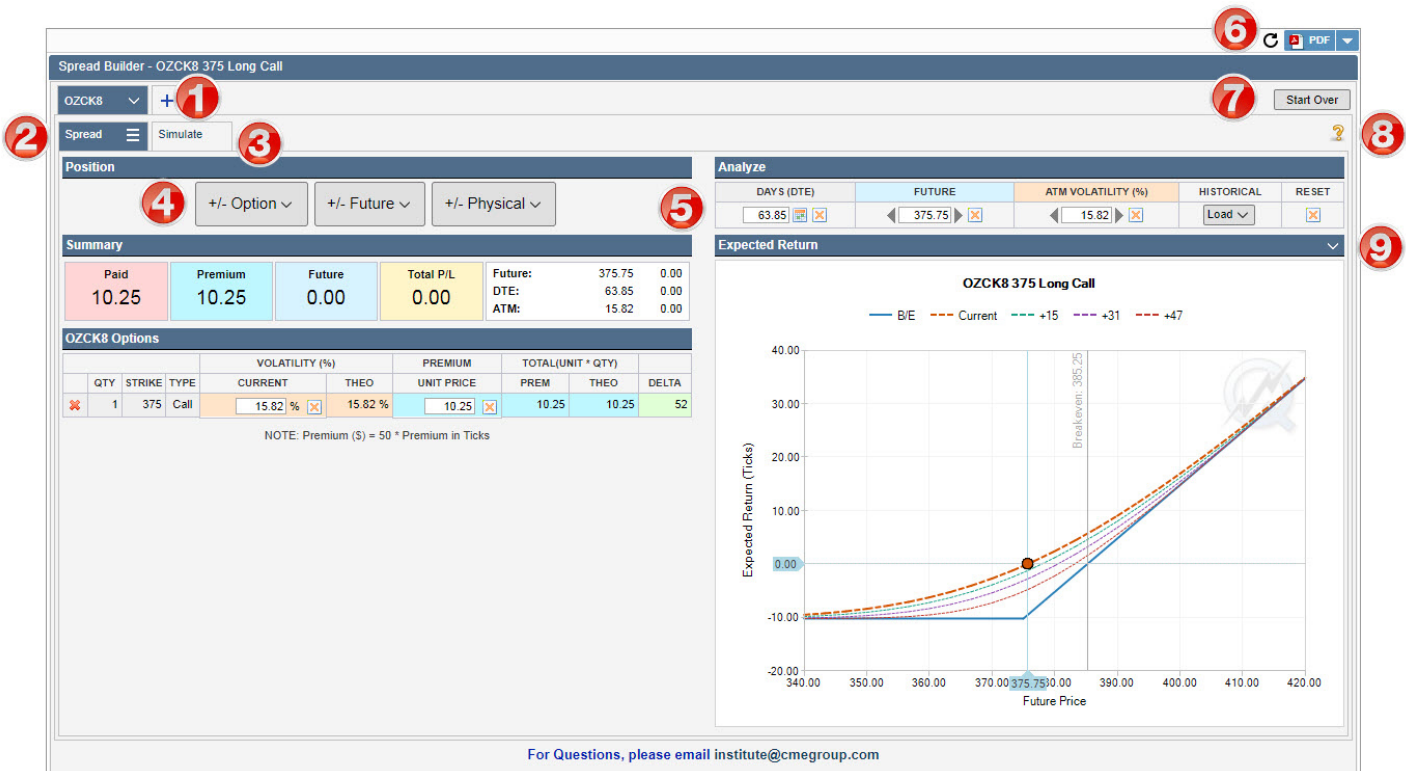
Additional Notes

- NOTE: Adding a Physical component will place the spread builder into a "hedge" mode. All futures and options added in this hedge mode will display how the derivative positions will affect the physical price as the underlying futures contract moves up or down.

For Questions, please email institute@cmegroup.com

Running Simulation Scenarios

1. Add an additional strategy to analyze. If more than one strategy is built. **Simulate All** tab will be available, allowing comparison between the strategies.
2. Adjust chart settings – specifically view profit and loss in ticks or dollar terms
3. Run the strategy through hypothetical, monte carlo underlying scenarios.
4. Add additional instruments to the current strategy.
5. Allows user to view strategy summary, profit and loss charting, analyze and manually adjust days til expiration (DTE), Future price, ATM (at the money) Volatility, Historical market conditions, Reset.
6. Creates PDF of current view
7. Start Over – clears current strategy
8. Help menu
9. View strategy values in terms of Theoretical Value, Delta, Gamma, Vega or Theta



To run an Underlying Simulation

1. Build your desired strategy.
2. Select the Simulate tab.
3. Select to run position through one of the hypothetical, Monte-Carlo scenarios. These scenarios are simulations targeted to follow a price path.
 - a. Up Fast – simulates a fast upward underlying move
 - b. Up Slow – simulates a slow upward underlying move
 - c. Flat – simulates a relatively unchanged underlying move
 - d. Down Slow – simulates a slow downward underlying move
 - e. Down Fast – simulates a slow downward underlying move
4. Profit/Loss of the strategy(ies) is charted.
5. Summary of the Strategy(ies) performance along with Profit/Loss is displayed.

