

# Average Price Method for Option Strips and Option Strip Spreads

CME Globex supports the average price method spread types [Option Strips \(SA\)](#) and [Option Strip Spreads \(GD\)](#).

Options Strips (SA) consist of the simultaneous purchase or sale of a succession of contract expirations at the same strike with equal lengths of time between all leg expirations. Option Strip Spreads (GD) consist of multiple Option Strip (SA) (referred to as "sub-strips") legs. The legs can have a mixture of sides and strip lengths.

The average price method applies as described below:

1. Option Strips (SA) are average priced spreads where each leg trades at the average price of all legs (**Note:** The spread is also priced in this manner).
2. Option Strip Spreads (GD) are priced as the sum of each average priced 'sub-strip.' Each 'sub-strip' is priced according to the average price Option Strip (SA) rules. Then each buy strip is added and each sell strip is subtracted to calculate the fair value price.



User defined spreads failing to meet the criteria for classification by CME as SA (tag 762=SA) shall be classified as GN (tag 762=GN). A UDS defined as GN shall be priced by customers as any other GN spread and will not be priced as an average of the legs.

For additional information, see [User-Defined Spread \(UDS\)](#).

For advanced information on UDS construction rules, see [UDS - Validation and Messaging Rules](#).

The following examples illustrate how average pricing affects Option Strips and Option Strip Spreads in different scenarios.

- [Example 1: Monthly Strip \(SA\) Pricing](#)
- [Example 2: Strip Spread \(GD\) Buy Sell Pricing](#)
- [Example 3: Summer Strip vs. Winter Strip \(GD\)](#)
- [Example 4: Buy the Q1 Call Strip, Buy the Q1 Put Strip \(GD\)](#)

## Example 1: Monthly Strip (SA) Pricing

The client system submits a [Security Definition Request \(tag 35-MsgType=c\)](#) message, creating an Option Strip (SA) user defined spread composed of the following:

Strip (SA) with legs:

- LOF6 C3000
- LOG6 C3000
- LOH6 C3000

Last trade price for each leg:

- LOF6 C3000 = \$0.20
- LOG6 C3000 = \$0.25
- LOH6 C3000 = \$0.30

Given the above, the customer will quote **\$.25** as the price of the spread (average of the components). This price must be within the Limits and Bands of the product.

Assuming a corresponding aggressing order matches the customer, CME Globex will match the trade and assign all legs of the spread a price of \$.25. The customer's order price (if matched) will be used as the price of the spread and the price of each of the legs.

## Example 2: Strip Spread (GD) Buy Sell Pricing

The client system submits a [Security Definition Request \(tag 35-MsgType=c\)](#) message for an instrument with the following existing Option Strips (SA) as spread legs, creating an Option Strip Spread (GD) user defined spread:

Buy Q1 Strip (Sub-Strip 1) with legs:

- LOF6 C3000
- LOG6 C3000
- LOH6 C3000

Last trade price for each leg:

- LOF6 C3000 = \$0.14
- LOG6 C3000 = \$0.16
- LOH6 C3000 = \$0.15

Sell Q2 Strip (Sub-Strip 2) with legs:

- LOJ6 C3000
- LOK6 C3000
- LOM6 C3000

Last trade price for each leg:

- LOJ6 C3000 = \$0.12
- LOK6 C3000 = \$0.13
- LOM6 C3000 = \$0.14

The average price for the 'sub-strips' is calculated to determine the difference between the trade price and fair value. The legs are then priced accordingly from the difference and any remainder is allocated.

- 'Sub-Strip 1' (Buy) Average Px: +\$0.15
- 'Sub-Strip 2' (Sell ) Average Px: -\$0.13
- Fair value for the GD: \$0.15 - \$0.13 = **\$0.02**

### Example 3: Summer Strip vs. Winter Strip (GD)

The client system submits a [Security Definition Request \(tag 35-MsgType=c\)](#) message for an instrument with the following existing Option Strips (SA) as spread legs, creating an Option Strip Spread (GD) user defined spread:

Buy Winter (Sub-Strip 1) (SA) with legs:

- LOX6 C3000
- LOZ6 C3000
- LOF7 C3000
- LOG7 C3000
- LOH7 C3000

Last trade price for each leg:

- LOX6 C3000 = \$0.50
- LOZ6 C3000 = \$0.55
- LOF7 C3000 = \$0.60
- LOG7 C3000 = \$0.65
- LOH7 C3000 = \$0.70

Sell Summer (Sub-Strip 2) (SA) with legs:

- LOJ7 C3000
- LOK7 C3000
- LOM7 C3000
- LON7 C3000
- LOQ7 C3000
- LOU7 C3000
- LOV7 C3000

Last trade price for each leg:

- LOJ7 C3000 = \$0.80
- LOK7 C3000 = \$0.85
- LOM7 C3000 = \$0.90
- LON7 C3000 = \$0.95
- LOQ7 C3000 = \$1.00
- LOU7 C3000 = \$1.05
- LOV7 C3000 = \$1.10

The winter strip (buy) will have an average price of \$0.60 and the summer strip (sell) will have an average price of \$0.95 for a fair value price of **-\$0.35** (\$0.60 - \$0.95).



A different number of options on each strip does not impact the average price for each Option Strip (SA) or the average price calculation of the fair value price of the Option Strip Spread (GD).

### Example 4: Buy the Q1 Call Strip, Buy the Q1 Put Strip (GD)

The client system submits a [Security Definition Request \(tag 35-MsgType=c\)](#) message for an instrument with the following existing Option Strips (SA) as spread legs, creating an Option Strip Spread (GD) user defined spread:

Buy Q1 Call Strip (SA) with legs:

- LOF6 C3000
- LOG6 C3000
- LOH6 C3000

Last trade price for each leg:

- LOF6 C3000 = \$0.50
- LOG6 C3000 = \$0.55
- LOH6 C3000 = \$0.60

Buy Q1 Put Strip (SA) with legs:

- LOF6 P3000
- LOG6 P3000
- LOH6 P3000

Last trade price for each leg:

- LOF6 P3000 = \$0.65
- LOG6 P3000 = \$0.70
- LOH6 P3000 = \$0.75

The call strip (buy) will have an average price of \$0.55 and the put strip (buy) will have an average price of \$0.70 for a fair value price of **\$1.25** (.55 + .70).