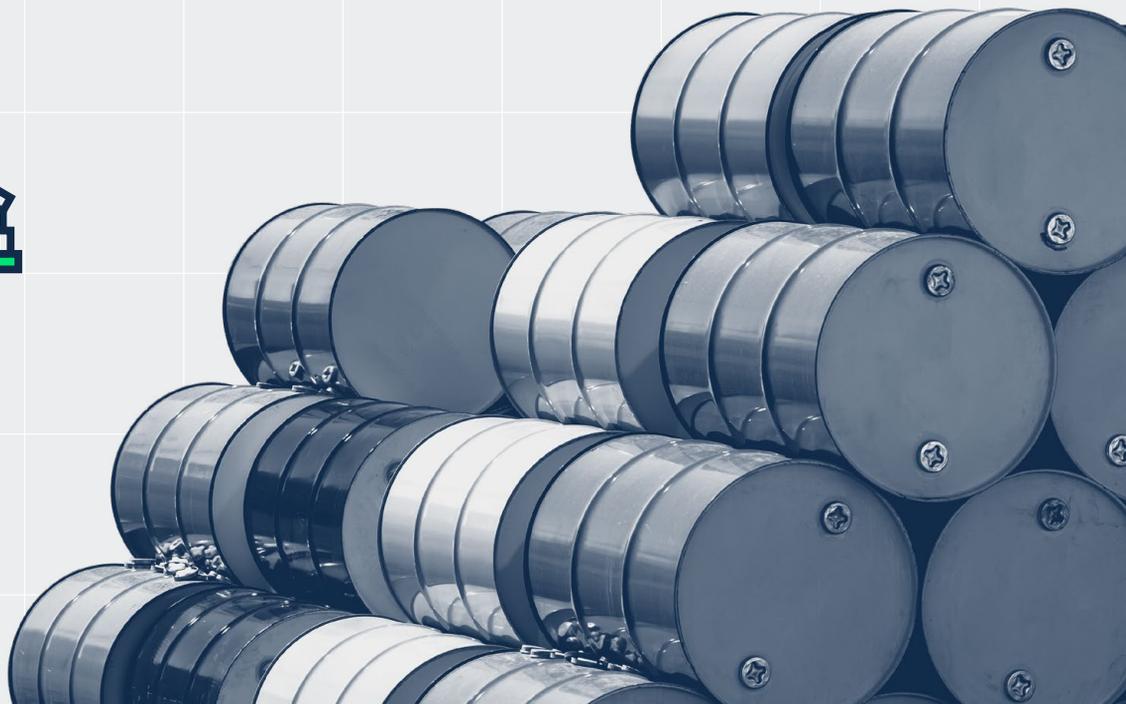




Welcome to NYMEX WTI Light Sweet Crude Oil futures and options.



Why NYMEX WTI Light Sweet Crude Oil futures and options?

NYMEX WTI Light Sweet Crude Oil (CL) and E-Mini Crude Oil (QM) futures and options are the world's most liquid, actively traded crude oil contracts. Priced out of Cushing, Oklahoma, these contracts have deep ties to energy markets around the world, making it the most efficient way to trade on U.S. and international events related to crude oil.

Crude oil markets are highly active, providing opportunities in nearly all market conditions. They also can be highly volatile, with prices affected by a number of factors directly related to the industry or occurring on a macroeconomic level (i.e., health of the economy and weather). Therefore, price risk management is critical whether you're in the supply chain or investing. NYMEX WTI futures' direct exposure to actual crude oil gives you a trading advantage over alternative methods. CL and QM headline a suite of NYMEX products, with multiple contract sizes to suit a variety of trader types and investment needs. Offering direct exposure to the oil market, CL and QM serve as a central point of global price discovery that better serves those who want to efficiently manage risk and speculate on market direction.

CL and QM are traded in a centrally-cleared marketplace, mitigating counterparty credit risk and all trades are regulated by the Commodity Futures Trading Commission (CFTC). These markets trade nearly 24 hours a day, 6 days a week and have become particularly valuable when used as inflationary hedge and a way to take part in the opportunities that changing oil prices present. From the Sunday open to the Friday Close, CL and QM futures and options provide traders with unmatched liquidity and flexibility to act as global events unfolds.

Key benefits of NYMEX WTI Light Sweet Crude Oil (CL) futures and options

NYMEX WTI futures offer several advantages that make them efficient, flexible tools to hedge or speculate on oil prices:



LEADING WTI MARKET LIQUIDITY

Deep, liquid market that trades 920K contracts daily and has 2.17M in open interest¹, offering the depth to handle orders of any size.



NEARLY AROUND-THE-CLOCK ELECTRONIC ACCESS

Manage positions as global news and events that impact prices unfold.



60/40 US TAX TREATMENT

Get certainty of blended 60% long term/40% short term capital gains treatment.²



CAPITAL EFFICIENCY

Control a larger notional value for a relatively small amount of money, enhancing your buying power.



MARGIN OFFSETS

Trading WTI Crude in the same marketplace as the rest of your NYMEX portfolio can reduce your overall margin requirements and help you save.



SAFETY AND SECURITY

Safety & security of central clearing helps substantially mitigate your counterparty credit risk.

¹ December 3, 2020

² CME Group Inc. and its affiliates do not provide tax, legal or accounting advice. This material has been prepared for informational purposes only, and is not intended to provide, and should not be relied on for, tax, legal or accounting advice. You should consult your own tax, legal and accounting advisors before engaging in any transaction.

Key benefits of NYMEX WTI E-mini Crude Oil (QM) futures

Gain the advantages of the Crude oil market but with a lower margin requirement and less notional exposure than a full-size contract.



TRADE A SLICE OF CRUDE OIL FUTURES

Get the same benefits as the world's leading Crude Oil futures, but for a smaller up-front initial margin and less notional exposure. Nearly 24-hour trading, no management fee, ability to short positions, and more.

DIVERSIFY TO HELP REDUCE RISK

Having a mix of different investment types in a portfolio can help cushion against wide swings in key sectors during uncertain markets.



GAIN PURE MARKET EXPOSURE

E-mini crude oil futures offer straightforward exposure to underlying crude oil, avoiding the slippage and tracking errors that can come with ETFs and stocks.

PRECISE RISK MANAGEMENT

Manage event volatility with the ability to fine-tune your exposure with a smaller contract.



MORE FLEXIBILITY

E-mini crude oil futures let you fine-tune your exposure and go short as easily as you can go long: no short-selling restrictions.

MORE OPPORTUNITY

Gain access to the crude market that you may have thought was out of reach. Add the benefits of diversification for lowering risk and increasing potential for rewards.

CL options at a glance

CRUDE OIL OPTIONS

| | |
|---------------------------------|---|
| CONTRACT UNIT | 1,000 barrels |
| PRICE QUOTATION | U.S. dollars and cents per barrel |
| TRADING HOURS | Sunday – Friday 6:00 p.m. – 5:00 p.m. (5:00 p.m. – 4:00 p.m. CT) with a 60-minute break each day beginning at 5:00 p.m. (4:00 p.m. CT) |
| MINIMUM PRICE FLUCTUATION | 0.01 per barrel = \$10.00 |
| PRODUCT CODE | CME Globex: LO CME ClearPort: LO Clearing: LO |
| LISTED CONTRACTS | Monthly contracts listed for the current year and the next 10 calendar years and 2 additional contract months. List monthly contracts for a new calendar year and 2 additional contract months following the termination of trading in the December contract of the current year. |
| SETTLEMENT METHOD | Deliverable |
| TERMINATION OF TRADING | Trading terminates 7 business days before the 26th calendar of the month prior to the contract month. |
| POSITION LIMITS | NYMEX Position Limits |
| EXCHANGE RULEBOOK | NYMEX 397 |
| BLOCK MINIMUM | Block Minimum Thresholds |
| VENDOR CODES | Quote Vendor Symbols Listing |
| STRIKE PRICE LISTING PROCEDURES | Strike Price Listing and Exercise Procedures Table |
| EXERCISE STYLE | American |
| UNDERLYING | Light Sweet Crude Oil Futures |

NYMEX WTI E-mini Crude Oil (QM) futures at a glance

E-MINI CRUDE OIL FUTURES

| | |
|---------------------------|---|
| CONTRACT UNIT | 500 barrels |
| PRICE QUOTATION | U.S. dollars and cents per barrel |
| TRADING HOURS | Sunday – Friday 6:00 p.m. – 5:00 p.m. (5:00 p.m. – 4:00 p.m. CT) with a 60-minute break each day beginning at 5:00 p.m. (4:00 p.m. CT) |
| MINIMUM PRICE FLUCTUATION | 0.025 per barrel = \$12.50 |
| PRODUCT CODE | CME Globex: QM CME ClearPort: QM Clearing: QM |
| LISTED CONTRACTS | Monthly contracts listed for the current year and the next 5 calendar years. List monthly contracts for a new calendar year following the termination of trading in the December contract of the current year. |
| SETTLEMENT METHOD | Financially Settled |
| FLOATING PRICE | The Floating Price for each contract month will be equal to the Light Sweet Crude Oil Futures contract final settlement price for the corresponding contract month on the last trading day for the E-mini Crude Oil Futures contract month. |
| TERMINATION OF TRADING | Trading terminates 7 business days before the 26th calendar of the month prior to the contract month. |
| SETTLEMENT PROCEDURES | E-mini Crude Oil Settlement Procedures |
| POSITION LIMITS | NYMEX Position Limits |
| EXCHANGE RULEBOOK | NYMEX Rulebook Chapter 401 |
| BLOCK MINIMUM | Block Minimum Thresholds |
| PRICE LIMIT OR CIRCUIT | Price Limits |
| VENDOR CODES | Quote Vendor Symbols Listing |

Highlighting the differences between NYMEX WTI Light Sweet Crude Oil (CL) and E-mini Crude Oil (QM) futures

NYMEX WTI Light Sweet Crude Oil (CL) and E-mini Crude Oil (QM) futures are similar contracts in that they offer some of the same benefits and exposure to the same underlying commodity. However, there are some key differences that traders should be aware of:

| | LIGHT SWEET CRUDE OIL (CL) | E-MINI CRUDE OIL (QM) |
|--|---|--|
| TICKER | CL | QM |
| CONTRACT UNIT | 1,000 barrels | 500 barrels |
| INITIAL MARGIN REQUIREMENT* | \$4,100 | \$2,350 |
| CONTRACT NOTIONAL VALUE* | \$46,700 | \$23,350 |
| MINIMUM PRICE FLUCTUATION (TICK VALUE) | .01 per barrel = \$10 | .025 per barrel = \$12.50 |
| SETTLEMENT METHOD | Physical | Financial |
| LISTED CONTRACTS | Monthly contracts listed for the current year and the next 10 calendar years and 2 additional contract months. List monthly contracts for a new calendar year and 2 additional contract months following the termination of trading in the December contract of the current year. | Monthly contracts listed for the current year and the next 5 calendar years. List monthly contracts for a new calendar year following the termination of trading in the December contract of the current year. |
| TERMINATION OF TRADING | Trading terminates 3 business day prior to the 25th calendar day of the month prior to the contract month. If the 25th calendar day is not a business day, trading terminates 4 business days prior to the 25th calendar day of the month prior to the contract month. | Trading terminates 4 business days prior to the 25th calendar day of the month prior to the contract month (1 business day prior to the termination of trading in Light Sweet Crude Oil (CL) futures). |
| ARE THERE OPTIONS? | Yes | No |
| TRADING HOURS | Sunday – Friday 6:00 p.m. – 5:00 p.m. (5:00 p.m. – 4:00 p.m. CT) with a 60-minute break each day beginning at 5:00 p.m. (4:00 p.m. CT) | |

Both markets, CL and QM, typically have one-tick wide markets at top-of-book

The screenshot shows the CME Group trading interface with a futures grid for WTI Future contracts. The grid includes columns for Contract Code (CC), Product, Description, Status, Quantity (+), Bid, Offer, Quantity (-), Pin, Last Price, Change, and Volume. Two contracts are visible: CL (WTI Future, Feb21) and QM (WTI E-mini Future, Feb21). The CL contract has a bid of 47.39 and an offer of 47.41, with a last price of 47.40 and a volume of 56,673. The QM contract has a bid of 47.400 and an offer of 47.425, with a last price of 47.400 and a volume of 960.

| X | CC | Product | Description | Status | + | Qty | Bid | Ofr | Qty | Pin | Last | Change | Volume |
|--------------|----|-------------------|-------------|--------|---|-----|--------|--------|-----|-----|--------|--------|--------|
| - WTI Future | | | | | | | | | | | | | |
| x | CL | WTI Future | Feb21 | Open | + | 48 | 47.39 | 47.41 | 28 | | 47.40 | +1.68 | 56,673 |
| x | QM | WTI E-mini Future | Feb21 | Open | + | 2 | 47.400 | 47.425 | 27 | | 47.400 | +1.675 | 960 |

Source: CME Direct

What everyone needs to know about trading CL and QM

Product description

WTI Light Sweet Crude Oil futures are a physically-delivered contract based on 1,000 barrels. The contract is priced in U.S dollars per barrel and traded electronically on CME Globex and cleared via CME ClearPort.

West Texas Intermediate (WTI) is a US blend of several streams of domestic light sweet crude oil. The delivery point is located in Cushing, Oklahoma, home to 90 million barrels of storage capacity. More than 3.5 million barrels a day can flow in and more than 3 million barrels a day can flow out. Cushing is a crucial hub where there is extensive infrastructure exists and serves as a vibrant trading hub for refiners and suppliers.

Therefore, a WTI Crude Oil futures contract represents an agreement to buy or sell 1,000 barrels of this blend of crude oil at a pre-determined time in the future, which is specified by the contract month being traded. Even though most futures contracts traded are not actually held until they are physically delivered, we will describe the contract expiration and delivery process in a subsequent section.

Contract size (notional value)

One WTI Crude Oil futures contract represents 1,000 barrels of WTI Crude Oil.

The "notional value" of one contract is equivalent to 1,000 X current price of the futures contract.

This represents the exposure, in terms of US dollars, a trader has to the price of WTI Crude Oil per contract.

EXAMPLE:

At a price of \$38.50 per barrel, the current notional value of one CL contract is $38.50 \times 1,000 = \$38,500$. In other words, with one contract, a trader "controls" \$38,500 worth of crude oil.

"Tick" value

Unlike stocks, futures are quoted in points, often referred to as "ticks", that represent the price move in a product.

In WTI Crude Oil (CL), the minimum allowable difference between the bid and offer is .01 (the quote represents the price of a barrel of crude) which represents \$.01 per barrel.

As we mentioned above, since each contract represents 1,000 barrels of crude oil, a .01 price move equates to \$10 ($1,000 \times .01 = \10).

EXAMPLE:

If a trader were to buy one CL contract at \$38.91 and sell it at \$39.00, the resultant P&L would be \$90.00 ($39.00 - 38.91 = .09 \times 1,000 = 90$).

| X | CC | Product | Description | Status | + | - | Qty | Bid | Ofr | Qty | Pin | Qty | Bid | Ofr | Qty | Last | Change |
|--------------|----|------------|-------------|--------|---|---|-----|-------|-------|-----|-----|-----|-----|-----|-----|-------|--------|
| - WTI Future | | | | | | | | | | | | | | | | | |
| x | CL | WTI Future | Dec20 | Open | + | - | 44 | 39.01 | 39.02 | 8 | | | | | | 39.02 | -0.13 |
| | | | | | | | 70 | 39.00 | 39.03 | 48 | | | | | | | |
| | | | | | | | 29 | 38.99 | 39.04 | 76 | | | | | | | |
| | | | | | | | 32 | 38.98 | 39.05 | 83 | | | | | | | |
| | | | | | | | 29 | 38.97 | 39.06 | 21 | | | | | | | |
| x | CL | WTI Future | Jan21 | Open | + | - | 18 | 39.33 | 39.34 | 13 | | | | | | 39.34 | -0.13 |
| | | | | | | | 43 | 39.32 | 39.35 | 50 | | | | | | | |
| | | | | | | | 67 | 39.31 | 39.36 | 11 | | | | | | | |
| | | | | | | | 10 | 39.30 | 39.37 | 9 | | | | | | | |
| | | | | | | | 7 | 39.29 | 39.38 | 14 | | | | | | | |

Source: CME Direct

Trading on Globex

One critical element to market liquidity is how tight or, in other words, how small the difference between the bid and offer is. As you can see in the image above, in the nearest two expiring contract months, CL is quoted at that minimum increment (.01) – indicating efficient, tight markets. Keep in mind, there is no guarantee that the market will always be quoted at .01, and in times of tremendous volatility, it may be quoted wider than .01. WTI Crude Oil markets are available for trading on Globex nearly 24 hours a day, 6 days a week throughout U.S., European and Asian trading hours.

Futures contracts months

WTI Crude Oil futures contracts expire every month (as opposed to, for example, E-mini S&P 500 futures that have only quarterly expirations) and it is important for traders to understand the dynamics of the contract expiration.

Trading terminates three business day prior to the 25th calendar day of the month and prior to the contract month. If the 25th calendar day is not a business day, trading terminates four business days prior to the 25th calendar day of the month and prior to the contract month.

While the highest volumes typically occur in the nearest expiring CL contract – because of supply/demand, storage, seasonal, and other factors – there is also active trading in deferred months.

Contract expiration/roll

WTI Crude Oil is a physically delivered contract, which means that if a trader holds an open position through the last trading day for the contract month, they will be obligated to either make delivery (short positions) or take delivery (long positions) of 1,000 barrels of WTI Crude Oil per contract.

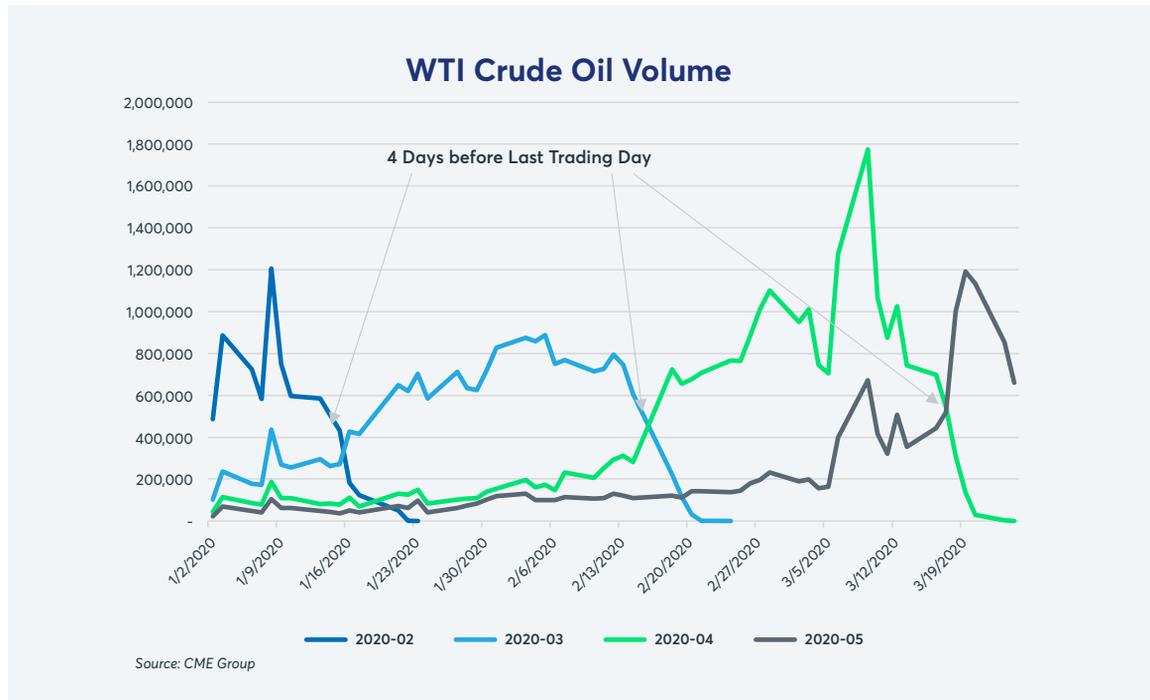
It is important to be aware of the dynamics involved in CL expirations. This includes being aware of the day the contract stops trading (as discussed above), the current supply/demand characteristics of the energy markets, and current storage capacity for crude oil – among other factors.

- Roll may begin
- Last trade / Settlement
- First position
- First notice
- First delivery



As we mentioned earlier, the last trading day for WTI Crude Oil occurs three business days before the 25th of each month. Unlike some other commodity products, the delivery process in WTI Crude Oil does not begin until after the last trading day. Therefore, many brokerage firms allow customers to trade the product until just before the last trading day.

As you can see in the graph below, the heaviest volume occurs in the nearest expiring month until the last trading day approaches, at which time the second month becomes the most heavily traded. As you can see by the point at which the second month "crosses" with the nearest month on the graph below, this tends to happen about four days before last trading day.



So, a trader holding an open position in CL as last trading day approaches essentially has three options.

They can:

Close their position by either buying or selling the number of contracts they are holding, leaving them without exposure to the price of crude oil.

Roll their position to a deferred month. Typically, traders who want to maintain exposure to the price of crude oil will roll their position to the next expiring month. This is a common practice throughout all futures products and there is typically a very efficient, liquid spread market on CME Globex that enables market participants to roll positions in a cost-effective manner. For example, if a trader was long one November CL contract and wanted to maintain that long exposure, they could sell a Nov/Dec spread (sell Nov buy Dec) and the resultant position would be long one December contract.

Hold the position and make or take delivery of physical crude oil. This process can be very complicated and expensive for individual traders and is usually only undertaken by professional, commercial firms that have established procedures in place.

Depending on the economics present at the time of contract expiration, the price of WTI Crude Oil has the potential to become more volatile as the last trading day approaches. For example, in times of excess supply during which storage facilities might be limited, customers may be relatively averse to taking delivery of the physical product, as storage costs would theoretically be elevated. Consequently, one might see a decline in prices as holders of long positions seek to roll or liquidate their positions.

For these reasons, it is critical that traders understand the timing of contract expirations and manage their positions as last trading day approaches. Knowing when the volume begins to move from the nearest expiring contract month to the second month can protect traders from potentially large price swings.

Delivery process

As we mentioned earlier, the delivery process in WTI Crude Oil does not begin until after the last trading day of the contract.

NYMEX Rulebook Chapter 200 describes the specific rules surrounding the delivery process for WTI Crude Oil. However, most individual traders will be prohibited from even entering into this process. Those holding positions in the nearest expiring month should be extremely cognizant of when the volume begins to move into the second month, as described above. [Learn more.](#)

Futures margin

In order to hold a futures positions, traders are required to post what we refer to as "margin" for each contract held. Unlike US equities, where trading "on margin" involves a loan from one's broker (and associated interest payments), "margin" in futures is a performance bond or collateral held by the broker.

Currently, the margin requirement for one contract of CL is \$4,750. If a trader holds one contract, they would be required to post that amount as collateral. If the position were to move against the trader, they would be required to post additional funds in order to maintain that amount. This is what is referred to as "mark to market".

It is important to keep in mind that margin requirements can change as volatility in the market adjusts. CME Group will typically require higher margins as volatility increases. Additionally, brokerage firms may, at times, require higher margins than the Exchange.

Energy/oil market fundamentals

The price of WTI Crude Oil can be impacted by many different factors, and it is the global benchmark for one of the world's most important commodities.

One of the reasons that WTI Crude Oil is a popular product to trade is the many different elements that can contribute to the price of oil including supply/demand, storage, currency fluctuation, geopolitical disruptions (particularly in the oil-producing Middle East), natural disasters, and more.

Because of the numerous factors that can impact the price of WTI Crude Oil, we recommend traders familiarize themselves with CME Group's Event Analyzer which lists the different economic events and number releases that can affect the price level. [Learn more.](#)



Here is a screenshot from the tool:

| OPTION EXPIRATIONS (0) | | ECONOMIC EVENTS | | | |
|-----------------------------|--------------------------------------|-----------------|-----------|----------|--------|
| | | PREVIOUS | CONSENSUS | FORECAST | ACTUAL |
| TUESDAY, NOVEMBER 10, 2020 | | | | | |
| 4:30 PM | API Crude Oil Stock Change 06/Nov | -8.01M | | | |
| THURSDAY, NOVEMBER 12, 2020 | | | | | |
| 8:30 AM | Inflation Rate YoY Oct | 1.4% | 1.3% | 1.5% | |
| 8:30 AM | Core Inflation Rate YoY Oct | 1.7% | 1.8% | 1.8% | |
| 11:00 AM | EIA Crude Oil Stocks Change 06/Nov | -7.998M | | | |
| 11:00 AM | EIA Gasoline Stocks Change 06/Nov | 1.541M | | | |
| FRIDAY, NOVEMBER 13, 2020 | | | | | |
| 10:30 AM | EIA Natural Gas Stocks Change 06/Nov | -36Bcf | | | |
| 1:00 PM | Baker Hughes Oil Rig Count 13/Nov | 226 | | | |

Source: CME Direct

Price limits

A price limit is the maximum price range permitted for a contract in each trading session. When markets hit the price limit, different actions occur depending on the product being traded. Markets may temporarily halt until price limits can be expanded, remain in a limit condition, or stop trading for the day, based on regulatory rules. You can check daily CL price limits to make sure your trades are never left hanging during a price limit halt. Find daily CL price limits [here](#).

Dynamic circuit breakers

Dynamic circuit breakers (DCBs) are similar to traditional circuit breakers but move with the market throughout the day. Within a specific time interval, DCBs define an upper and lower limit of how far an instrument is allowed to move in a specific time interval, usually an hour.

Each product has its own assigned value used to calculate the circuit breaker level, typically a percentage of its previous settlement price. CL's dynamic circuit breaker is 15% and you can find more information on our DCB methodology [here](#) and [here](#). You can download our DCB per product [here](#).

Velocity logic

Velocity logic governs how far the price of a product can move within a very short period of

time. Whereas price limits and DCBs look at price moves on a daily or hourly basis, velocity logic is a control designed to prevent market dislocation on a second by second, or even sub-second, time interval. Velocity logic events can cause a particular market to halt temporarily when a market reopens after a velocity logic event has been triggered, CME Group will restart the 60-minute window and calculate accordingly. Velocity logic uses a lookback window's highest and lowest prices in the previous time interval. If CL's lookback window consists of a high price = 42.17 and a low price = 42.13 and the velocity logic's variance is 1.5, then the VL high bid = 43.67 and VL low bid = 40.63. You can learn more about velocity logic [here](#).

Price banding

Price banding evaluates incoming orders to ensure that a single order is not filled outside of an acceptable range from the last price, either on the upside or downside. It is symmetrically applied to both the upside (for bids) and downside (for offers) to determine the price band variation range (PBVR). With each price change, the PBVR is recalculated and the new range is applied. The CME Globex platform rejects all bids and offers outside the PBVR. CL's price band is .5 (found in the GCC Product Reference Sheet). If CL is trading at \$42.15, then the effective price bands are: bid = \$42.65 and ask = \$41.65.

Educational resources

Ready to experience the value that trading futures can bring to your portfolio?

Get started with CME Group's educational resources – from introductory courses to trading tools, find what you need to get started at cmegroup.com/activetrader



INTRO TO FUTURES

Learn more about futures contracts, the role of a futures exchange, who participates in this market, and how a futures trade works.



ECONOMIC RESEARCH AND NEWS

Get expert breakdowns on how macroeconomic factors may impact the markets and view the latest gold market news.



THE IMPORTANCE OF CUSHING, OKLAHOMA

Learn more about crude oil futures and how they may fit into your portfolio.



UNDERSTANDING COMMODITY STORAGE



CRUDE OIL FUTURES VERSUS ETFs



WTI PRODUCT OVERVIEW



INTRODUCTION TO CRUDE OIL

- Discover WTI: A Global Benchmark
- Introduction to European Crude Oil
- Learn about Crude Oil Across Asia Region
- Understanding Crude Oil in the United States

Trading tools for Active Traders

Active traders should have a good understanding of the tools available to help you recognize market conditions that can impact gold prices.



COMMITMENT OF
TRADERS TOOL



OPEN INTEREST
HEATMAP TOOL



CME GROUP
OPTIONS DIRECTORY/
EXPIRATIONS CALENDAR



ECONOMIC RELEASE
CALENDAR



CME GROUP LISTINGS/
EXPIRATIONS CALENDAR



OPEC WATCH TOOL



CME GLOBAL COMMAND
CENTER SYSTEM ALERTS



PRICE ACTION ALERTS



QUIKSTRIKE OPTIONS
PRICING AND ANALYSIS
TOOLS



CME LIQUIDITY TOOL



cmegroup.com

Neither futures trading nor swaps trading are suitable for all investors, and each involves the risk of loss. Swaps trading should only be undertaken by investors who are Eligible Contract Participants (ECPs) within the meaning of Section 1a(18) of the Commodity Exchange Act. Futures and swaps each are leveraged investments and, because only a percentage of a contract's value is required to trade, it is possible to lose more than the amount of money deposited for either a futures or swaps position. Therefore, traders should only use funds that they can afford to lose without affecting their lifestyles and only a portion of those funds should be devoted to any one trade because traders cannot expect to profit on every trade.

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