

Overview

The Cboe U.S. Equities Auction Process provides electronic price discovery mechanisms that efficiently match orders in Cboe-listed securities at a single price on the Cboe BZX U.S. Equities Exchange. These auctions have been designed to efficiently maximize the number of shares executed at a single price for securities during a New Issue Auction, after a halt and during the regular market open/close.

Order Types

Regular Market and Limit Orders

- › Executable from 7 a.m. to 8 p.m. ET, including during the Opening and Closing Auctions.

On-Open Orders

- › Specifically request an execution at the opening price.
- › Can be Limit-On-Open (LOO) or Market-On-Open (MOO).
- › Must be received prior to 9:28 a.m. ET opening cut-off.

On-Close Orders

- › Specifically request an execution at the closing price.
- › Can be Limit-On-Close (LOC) or Market-On-Close (MOC).
- › Must be received prior to 3:59 p.m. ET closing cut-off.

Late Orders

- › Specifically request an execution at the opening or closing price.
- › Must be Late-Limit-On-Open (LLOO) or Late-Limit-On-Close (LLOC).
- › Accepted after the opening or closing cut-off.
- › Effective price is set to be no more aggressive than the NBB for bids and the NBO for offers. The effective price is adjusted to be more aggressive up to the limit price as the NBBO changes.

Regular Hours Only (RHO) Orders

- › Accepted from 6 a.m. to 4 p.m. ET but not executable during pre/post-market hours.
- › Both Market and Limit RHO orders are accepted.
- › RHO orders will be executable in Opening, Closing and in IPO, New Issue and Halt Auctions.
- › Unfilled shares remaining after participation in the Opening Auction will be transferred to the continuous book. Unfilled shares remaining on the continuous book at the Closing Auction will participate in the Closing Auction. Unfilled shares remaining at the conclusion of the Closing Auction will be canceled.

Opening/Closing Auction Times

| Opening Auction | Closing Auction |
|---|--|
| 8:00 a.m. – The Cboe Pre-market Trading session begins. Dissemination of Opening Auction information begins. | 3:00 p.m. – Dissemination of Closing Auction information begins. |
| 9:28 a.m. –MOO/LOO orders are cut-off and LLOO orders are accepted at this time. | 3:59 p.m. – MOC/LOC orders are cut-off and LLOC orders are accepted at this time. |
| 9:30 a.m. – The Opening Auction Match occurs. | 4:00 p.m. – The Closing Auction Match occurs. |
| | 8:00 p.m. – The Cboe Post-market Trading session ends. |

Cboe Auction Information

- Disseminated **every five seconds** during the open/close cut-off periods (8:00–9:30 a.m. ET and 3:00–4:00 p.m. ET) and during quote-only periods for Cboe IPO, New Issue and Halt Auctions.
- Available to subscribers of the Cboe PITCH data feed and Cboe Auction Feed, and is also available on the Cboe website.
- Many market data vendors also disseminate Cboe Auction information, maximizing transparency for all investors.
- Time, Security, Auction Type, Reference Price, Reference Price Range, Reference Buy Shares, Reference Sell Shares, Indicative Price and Auction Only Price may be included.

Execution Priority*

1. Market orders (i.e., MOO, MOC, market RHO, regular market) received prior to the auction will be executed in time priority.
2. Limit orders (i.e., Limit, LOO, LOC, LLOO, LLOC) **priced at or more aggressively than the auction price** received prior to the auction match. Effective price will be considered for LLOO and LLOC, not limit price. Regular limit orders may include displayed, hidden and reserve orders. Price/time priority of the specified limit will be considered, and hidden—followed by reserve size—for each price level will be executed after displayed liquidity prior to moving to the next price level.

Official Opening Price

- Upon completion of the Cboe Opening Auction, the Cboe Official Opening Price for Cboe-listed securities will be disseminated to the consolidated tape along with a bulk execution. This will be represented by a sale condition code of ‘O’ (Market Center Opening Trade).
- If a Cboe-listed security does not have an Opening Auction Price (e.g., there is insufficient interest to open the security), the Cboe Official Opening Price will be the official previous closing price and will be represented by a sale condition code of ‘Q’ (Market Center Official Open).

Official Closing Price

- Upon completion of the Cboe Closing Auction, the Cboe Official Closing Price for Cboe-listed securities will be disseminated to the consolidated tape along with a bulk execution. This will be represented by a sale condition code of ‘6’ (Market Center Closing Trade).
- If an issue does not have a Closing Auction Price (e.g., there is insufficient interest to conduct a closing auction), the Cboe Official Closing Price will be the price of the Final Last Sale Eligible Trade. This will be represented by a sale condition code of ‘M’ (Market Center Official Close).

Official IPO/New Issue Opening Price

- Upon completion of an IPO/New Issue Auction, the Cboe Official Opening Price for the newly issued security will be disseminated to the consolidated tape along with a bulk execution. This will be represented by a sale condition code of ‘O’ (Market Center Opening Trade).
- This is the same code used for the standard Cboe Official Opening Price disseminated at market open.

* Refer to the Cboe Auction Process Specification for full details regarding which order types are functional within a particular auction type.

Additional references available at Markets.Cboe.com/US/Equities/Support/Technical/

[Cboe Auction Process Specification](#)

[Multicast Depth of Book \(PITCH\) Specification](#)

[TCP Depth of Book \(PITCH\) Specification](#)

[Cboe Auction Viewer](#)

[U.S. Equities FIX Specification](#)

[U.S. Equities BOE Specification](#)

[BZX Exchange Fee Schedule](#)

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