## Algorithmic strategies

### Liquidity sourcing strategies

Strategy	Description
Dark Aggregator	Dark Aggregator manages order placements in non-displayed venues to maximize liquidity capture and reduce information leakage. It will fully commit orders seeking dark liquidity, hidden liquidity on lit venues, and conditionals on ATS's. It will continuously seek to source liquidity and rebalance as it monitors and adjusts to where liquidity is detected. Optionally, the algorithm can be customized to seek only block liquidity.
SOR	SOR seeks to maximize liquidity capture by fully committing orders utilizing displayed and non-displayed venues. As liquidity is sourced it will rebalance, but it will also maintain a displayed quote and manage the displayed leg in the market. Optionally, the algorithm can be customized to prioritize price improvement, costs, or speed of execution.

### Schedule driven strategies

Strategy	Description
VWAP	VWAP is a volume weighted algorithm leveraging historical volume curves and trades over a specified time period. Benchmarked to the VWAP, it will adhere to the curve with some discretion based on stock profile and trader intent.
TWAP	TWAP is a time weighted algorithm that trades over a specified time period. It will evenly distribute time intervals with some randomization to lessen predictability.

### Dynamic/adaptive strategies

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Strategy	Description
POV	Percentage Of Volume targets the desired percentage of volume set in the order. It is a reactive algorithm that tracks volume*, including odd lots, in real-time as the strategy will continuously calibrate its participation.
Arrival Price	Arrival price will take into account quantity, optional start time, and end time. It will build a trading schedule based on size of order, expected participation rate, volatility and spread in the stock seeking completion as close to the start time while minimizing impact.
Auction	Auction is designed to mitigate impact on the 'Opening' or 'Closing' auction. Either 'Open', 'Close' or 'Smart' can be selected within the strategy. Each uses a predictive model taking into account historical Auction ADV and imbalance feeds to determine shares to be traded in the auctions. The auction slice is influenced by 'Urgency' or 'Target Auction %'. For the 'Open', after the cut-off the strategy will leverage the imbalance feeds from the listing exchange and use imbalance only orders to maximize fills for the Open. For the 'Close' the strategy will build a schedule for any residual shares to trade in the continuous market prior to the close to mitigate impact on the closing price.

<sup>\*</sup>The descriptions above provide a general overview of the manner in which various strategies operate. For a more detailed description or if you have any questions, please speak to a Clearpool representative.

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### Floor Broker Algorithms

### Liquidity sourcing strategies

DARKAGG - Passive	Dark Aggregator strategy pegged to the passive side of the NBBO.
DARKAGG - Passive/Mid	Dark Aggregator strategy pegged to the passive side of the NBBO that will periodically sweep midpoint liquidity.
DARKAGG - Midpoint	Dark Aggregator strategy pegged to the midpoint of the NBBO.
DARKAGG - Mid/Aggressive	Dark Aggregator strategy pegged to the midpoint of the NBBO that will sweep full spread liquidity periodically.
DARKAGG - Aggressive	Dark Aggregator strategy pegged to the aggressive side of the NBBO.
SOR MultiPost Passive	Passive SOR Strategy that will post on multiple displayed venues.

#### Schedule driven Strategies

VWAP - Provide Only	Passive VWAP that will not cross the spread.
VWAP - Provide Only Max Vol X%	Passive VWAP that will not cross the spread and that will adhere to a defined maximum participation rate.
10b18 VWAP	10b-18 compliant VWAP Strategy.
10b-18 Passive VWAP	10b-18 compliant VWAP Strategy that will not cross the spread.
TWAP - Provide Only	Passive VWAP that will not cross the spread.
TWAP - Provide Only Max Vol X%	Passive TWAP that will not cross the spread and that will adhere to a defined maximum participation rate.
10b18 TWAP	10b-18 compliant TWAP strategy.
10b-18 Passive TWAP	Passive TWAP that will not cross the spread.

### Dynamic/adaptive strategies

POV X%	Percentage of Volume strategy targeting a defined participation rate.
POV Passive X%	Passive POV targeting a defined participation rate that will not cross the spread.
10b18 POV X%	10b-18 compliant POV strategy targeting a 3% participation rate.
10b-18 Passive POV X%	10b-18 compliant POV strategy targeting a defined participation rate that will not cross the spread.