

HotTrader[®]

Functional Overview

Algorithm Pack

Control
Precision
Performance



Introduction

The *HotTrader Algorithmic Trading Platform* comes ready to deploy with a pack of generic algorithms. These algorithms can be used immediately by clients and **serve as a baseline for the customization and design of new algorithms.**

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Generic Parameters

Every HotTrader algorithm is configured with the following parameters:

Parameter	Description
Basket	The basket identifier used to group related orders together
Exchange	The exchange code on which the stock is traded
Stock	The stock symbol to trade
Algorithm Type	The type of algorithm (Limit, TWAP, VWAP, % Vol, ...)
Side	Buy or Sell. Not relevant to algorithms which buy and sell to take profits
Limit Price	The maximum or minimum price at which the algorithm will send orders to the market
Order Quantity	The quantity to trade. The algorithm is complete when this quantity has been traded

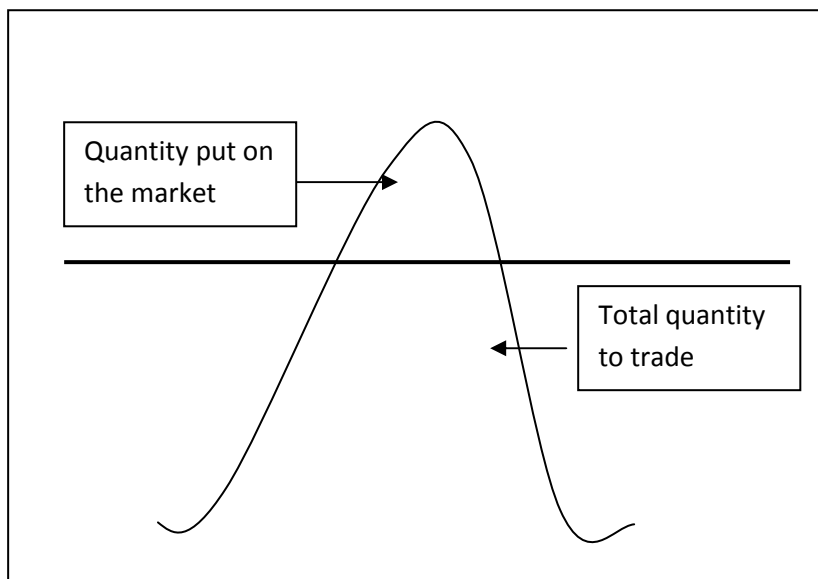
Limit Iceberg

The limit iceberg algorithm is suitable for trading an order at a fixed limit price where the duration of the order is not important. For large order quantities, the maximum order size parameter controls the portion of the 'iceberg' that is sent to the market at any one time.

Specific Parameters

Parameter	Default	Description
Max Market Quantity	10%	The percentage of the target quantity to put on the market at one time
Max Orders	0	The number of orders that can be on the market at one time. 0 = infinite number of market orders
Renewal %	50%	The percentage of the max market quantity that must be filled before issuing another order on the market to achieve max market quantity

Behaviour



TWAP (Time Weighted Average Price)

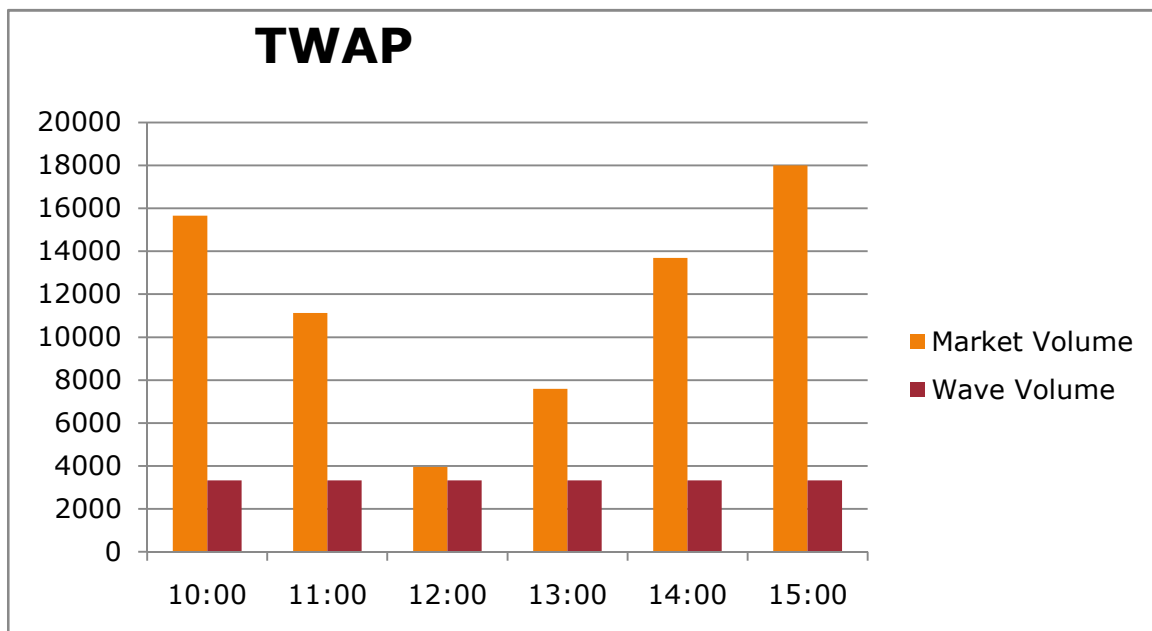
The TWAP algorithm is used to trade a fixed quantity order over a set period of time. The order is broken down into discrete time intervals (waves) with an equal quantity to be traded in each wave.

Specific Parameters

Parameter	Default	Description
Start Time	Time of creation	Start time of the first wave
EndTime	Start time + 2 hours	End time of the last wave
Wave number	3	Number of waves used to split the order quantity

Behaviour

The user wants to trade 20,000 shares between 10:00 and 15:00, using 6 waves. The TWAP algorithm will put 6 waves of 3,333 shares on the market at 10:00, 11:00, 12:00, 13:00, 14:00 and 15:00.



VWAP (Volume Weighted Average Price)

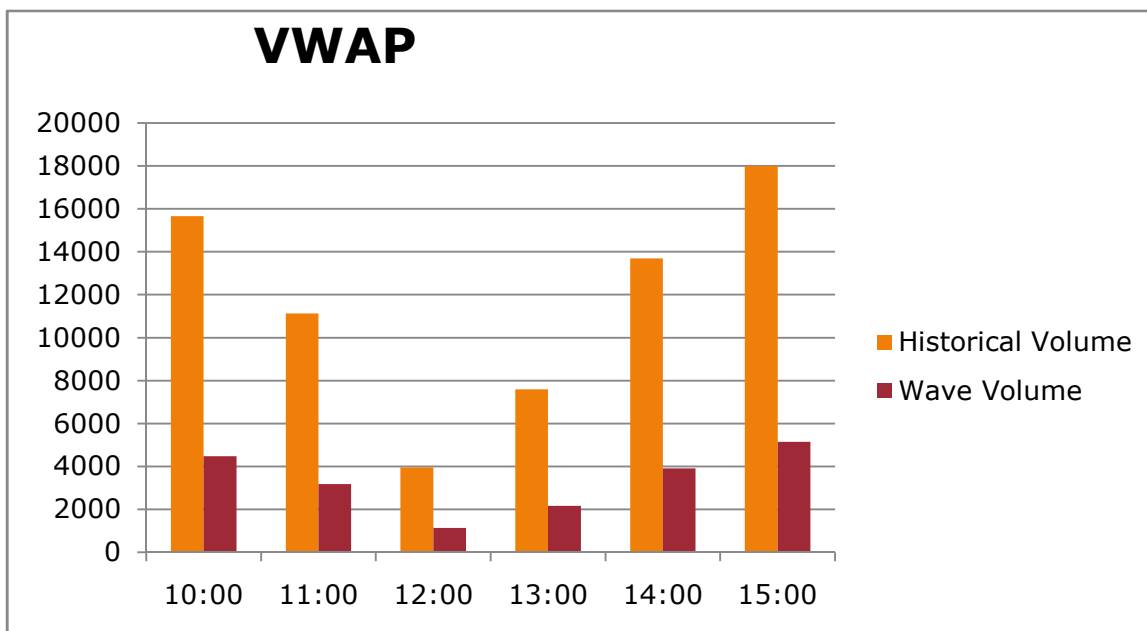
The VWAP algorithm is used to trade a fixed quantity order over a set period of time. The order is broken down into discrete time intervals (waves) where the quantity to be traded in each wave is proportional to the average historical market volume over the same time period. It is ideally suited for individual orders or baskets which must be worked over several hours.

Specific Parameters

Parameter	Default	Description
Start Time	Time of creation	Start time of the first wave
EndTime	Start time + 2 hours	End time of the last wave
Wave number	3	Number of waves used to split the order quantity

Behaviour

The user wants to trade 20,000 shares between 10:00 and 15:00, using 6 waves. The VWAP algorithm will put 6 waves on the market at 11:00, 12:00, 13:00, 14:00, 15:00, 16:00. The quantity of each wave will be proportional to the average historical market.



Participation (% Volume)

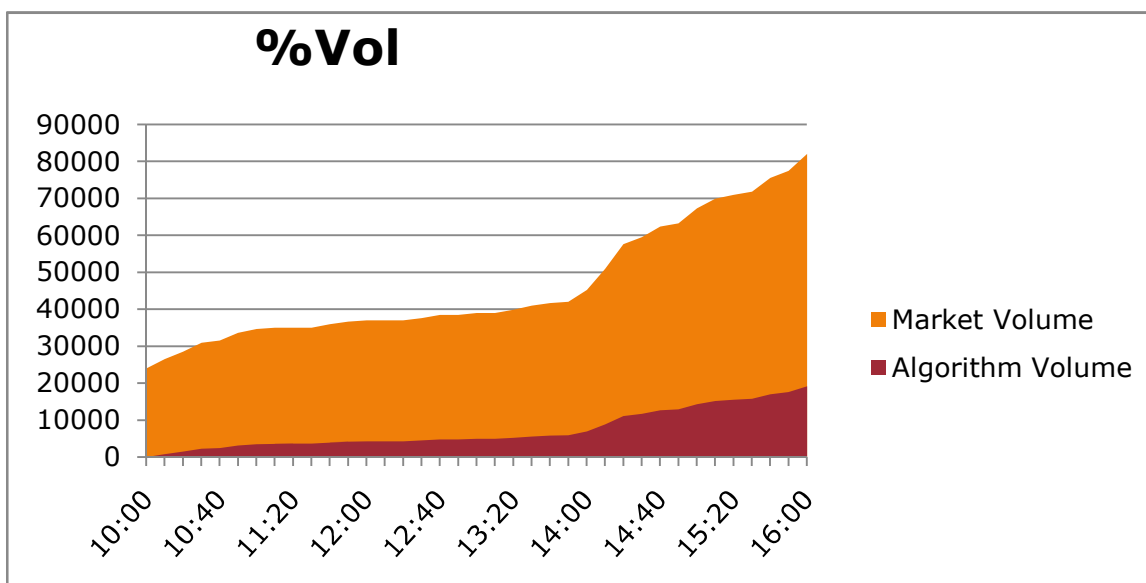
The participation algorithm is used to trade up to the order quantity using a rate of execution that is in proportion to the actual volume trading in the market. It is ideal for trading large orders in liquid instruments where controlling market impact is a priority.

Specific Parameters

Parameter	Default	Description
Participation %	30%	The percentage of the market volume to trade
Aggressiveness	2	1-3. Governs how the algorithm tries to executes the desired volume. The higher the aggressivity, the more the algorithm will track the volume at the expense of the trading price.
Low Deviation %	2%	The percentage of the target volume deviation which will trigger an initial corrective action. The price at which the corrective order will be placed depends on the aggressiveness parameter
High Deviation %	5%	The percentage of the target volume deviation which will trigger a full corrective action.
Completion %	10%	The percentage of the target quantity remaining at which point the algorithm will immediately complete.

Behaviour

The trader wants to trade no more than 1/3 of the volume. The incremental market volume is counted from the time that the order starts trading



Seek and Destroy

The “seek and destroy” algorithm is designed to hide on the passive side of the order book until there is sufficient liquidity available on the aggressive side.

Parameter	Default	Description
Display price		The price at which “display size” will be put on the passive side of the order book
Display size		The size to put on the passive side of the order book
Seek size		Quantity required on the aggressive side of the order book to trigger an order which will pay the spread

Limit On Close

The limit on close algorithm aims to trade the target quantity during the closing auction of the exchange. If no limit price is set, it will trade at a limit of 2.5% of the last traded price before the auction.

Parameter	Default	Description
% Last Traded	2.5%	The percentage to apply on the last traded price at which the quantity must be put on the market at auction time.