# Blahtech Supply Demand

Supply Demand uses previous price action to identify potential imbalances between buyers and sellers. The key is to identify the better odds zones, not just the untouched ones.

Blahtech Supply Demand indicator delivers functionality previously unavailable on any trading platform. This 3-in-1 indicator not only highlights the higher probability zones using a multi-criteria strength engine, but also combines it with multi-timeframe trend analysis and previously confirmed swings. Driven by an easy to use interface and innovative backtest mode this indicator is a must-have for all supply demand traders.

## Feature Highlights

* Multi-timeframe display
* Backtest directly on the chart
* Summary panel
* Multi-timeframe trend analysis
* Confirmed swings (high and low QPoints)
* Zone strength engine (seven criteria)
* Advanced level detection (peaks, consolidations, drop-base-drops)
* Quarterly and Yearly levels
* Control of overlapping levels
* Configurable level information
* Fast access hot-keys

## Input Parameters

### ======== Solo Timeframe 1 ========

By default the SD indicator displays the levels for the current timeframe only. The colours and styles for this mode can be set separately from the multi-timeframe display modes (Timeframes 1,2,3 below)

* **Zone Style**

Choose the draw style for the solo timeframe boxes on the chart

Solid, Line, Dash, Dotted, Dash-dotted, Dash-dot-dash

**Hot-key:** This can be changed without bringing up the parameters with **“Z”** key

* **Supply Colour Strong**

Colour for the solo strong supply levels

* **Supply Colour Weak**

Colour for the solo weak supply levels

* **Demand Colour Strong**

Colour for the solo strong demand levels

* **Demand Colour Weak**

Colour for the solo weak demand levels

* **Colours – Auto defaults**

Change default colours for backgrounds and styles. This uses slightly darker colours for black backgrounds and also a simpler two tone colour scheme for solid zone style. (Default true)

### ========= Timeframe 1 =========

* **Visible**

Show / hide timeframe 1 boxes on the chart. The “Solo” timeframe settings are used when this is the only timeframe visible. When there are multiple timeframes visible these settings then take effect.

**Hot-key:** This can be changed without bringing up the parameters with the **“1”** key

* **Timeframe**

Choose the period for Timeframe 1

1. Current
2. Fixed
3. Mapped

* **Timeframe Map**

Change the period when the chart timeframe is changed (mapped mode only)

* **Zone Style**

Choose draw style for the boxes

* **Zone Line Width**

Width of the lines around the level boxes

* **Supply Colour Strong**

Colour for the strong timeframe 1 supply levels

* **Supply Colour Weak**

Colour for the weak timeframe 1 supply levels

* **Demand Colour Strong**

Colour for the strong timeframe 1 demand levels

* **Demand Colour Weak**

Colour for the weak timeframe 1 demand levels

### ========= Timeframe 2 =========

* **Visible**

Show / hide timeframe 2 boxes on the chart

**Hot-key:** This can be changed without bringing up the parameters with the **“2”** key

* **Timeframe**

Choose the period for Timeframe 2

1. Current
2. Fixed
3. Mapped

**Timeframe Map**

Change the period when the chart timeframe is changed (mapped mode only)

* **Zone Style**

Choose draw style for the boxes

* **Zone Line Width**

Width of the lines around the level boxes

* **Supply Colour Strong**

Colour for the strong timeframe 2 supply levels

* **Supply Colour Weak**

Colour for the weak timeframe 2 supply levels

* **Demand Colour Strong**

Colour for the strong timeframe 2 demand levels

* **Demand Colour Weak**

Colour for the weak timeframe 2 demand levels

### ========= Timeframe 3 =========

* **Visible**

Show / hide timeframe 3 boxes on the chart

**Hot-key:** This can be changed without bringing up the parameters with the **“3”** key

* **Timeframe**

Choose the period for Timeframe 3

1. Current
2. Fixed
3. Mapped

* **Timeframe Map**

Change the period when the chart timeframe is changed (mapped mode only)

* **Zone Style**

Choose draw style for the boxes

* **Zone Line Width**

Width of the lines around the level boxes

* **Supply Colour Strong**

Colour for the strong timeframe 3 supply levels

* **Supply Colour Weak**

Colour for the weak timeframe 3 supply levels

* **Demand Colour Strong**

Colour for the strong timeframe 3 demand levels

* **Demand Colour Weak**

Colour for the weak timeframe 3 demand levels

### ========= Timeframe 4 =========

* **Timeframe**

Choose the period for Timeframe 4 used in the summary display and trend analysis

* **Timeframe Map**

Change the period when the chart timeframe is changed (mapped mode only)

### ========== Q Points =========

* **QPoints**

Display high low swing points on the chart.

1) Hidden

2) Timeframe 1

3) Timeframe 2

4) Timeframe 3

5) Timeframe 4

**Hot-key:** This can be changed without bringing up the parameters with the **“Q”** key

* **QPoints - Show Text**

Display QHi and QLo text to the right of the levels

* **QPoints – Min Range (Percent Avg Bar Size)**

Set the minimum size for a valid swing. (Default 6 times average bar size)

* **QPoints – Min Retrace (Percent QPoint Range)**

Set the minimum size the swing must retrace before it can be considered a new swing (Default 50%)

* **QPoints – Min Approach (Percent QPoint Range)**

Set the minimum size of the approaching peak for it to be considered a fresh swing rather than a continuation of a previous swing (Default 27%)

* **QPoints – Chart Colour**

Set the colour of the QPoint lines and text on the chart

### ========== Summary =========

* **Summary**

Show / Hide the Summary display dialog on the chart.

**Hot-key:** This can be changed without bringing up the parameters with the **“S”** key

* **DI - Show**

Show an extra column for the directional index (This is only a minor component in the trend analysis so is hidden by default)

* **DI - Periods**

Number of bars to use when calculating the direction index

* **DI – Highlight Level**

Value of the DI slope to change the colour from grey to SkyBlue/Pink

* **Trend Change – Overlaps**

Set the type of levels that cause the trend to change when broken. Changing to “Overlap all” will increase the sensitivity of the trend changes (Default is partial overlaps)

* **Trend Change – Min Risk Reward**

Set the risk reward ratio for a level to be considered significant enough to trigger a trend change. Reducing this value will cause more levels to trigger a trend change (Default 2.5)

* **Highlight QPoint Counter Trend**

Highlight the SupDem column with SkyBlue/Pink when we detect a strong counter trend level inside a QPoint. (Default is false which only highlights strong levels that are with the trend)

* **Summary Text Size**

Text size for the Summary dialog

### ========== Hot Keys ===========

* **Hot Keys**

Show / Hide the Hot-key dialog.

**Hot-key:** This can be changed without bringing up the parameters with **“H”** key

* **With Trend Scores**

Take account of the overall trend when calculating strength of levels.

**Hot-key:** This can be changed without bringing up the parameters with **“W”** key

* **Detect Base**

1. Peaks
2. Peaks + consolidations
3. Peaks + consolidations + drop-base-drops

**Hot-key:** This can be changed without bringing up the parameters with **“D”** key

* **Overlaps**

Display overlapping zones.

1. Overlaps None
2. Overlaps Partial
3. Overlaps All

**Hot-key:** This can be changed without bringing up the parameters with **“O”** key

* **Info Text**

Display text based information for levels on the chart.

1. Hidden
2. Size, Lots
3. Size, Lots, Strength
4. Size, Lots, Strength, Scoring
5. Date
6. Date, Size, Lots
7. Date, Size, Lots, Strength
8. Date, Size, Lots, Strength, Scoring
9. Custom – User defined string with substitutions

**Hot-key:** This can be changed without bringing up the parameters with **“I”** key

* **Prices**

Display high and low prices to the right of each level.

1. Hidden
2. Small
3. Large

**Hot-key:** This can be changed without bringing up the parameters with **“I”** key

* **Left Info**

Switch the info text from left to right.

**Hot-key:** This can be changed without bringing up the parameters with **“U”** key

* **Extend Box Beyond End**

Draw the boxes past the final bar so they don’t obscure the candles.

**Hot-key:** This can be changed without bringing up the parameters with **“X”** key

* **Flip Prices**

Change draw order of high and low prices so one is visible (This switch only works when “chart on foreground” is selected)

**Hot-key:** This can be changed without bringing up the parameters with **“F”** key

* **Hot Keys Text Size**

Set the text size for the Hot-key display dialog

### ========== Strength Engine ==========

* **Base Forming Hours**

Valid business hours for strong level base consolidations. H1 and lower levels only

* **Strong Levels – Score**

Score that must be attained before level is marked as strong (Default 0.75)

* **Strong Levels – Max Retouch**

Max times a level can be touched before being forced to weak (Default 2)

* **Base Tolerance (Percent Avg Bars Size)**

Max percentage difference for two bar sizes to be considered a base

* **Stop Loss Buffer (Percent Avg Bars Size)**

Size of buffer added to level when setting stop losses (wiggle room)

* **Initial Move Filter (Percent Avg Bars Size)**

Price movement away from the zone to qualify as a strong level

* **Significant Move (Percent Avg Bars Size)**

Price movement away from zone needed to add second point to the score

* **Clean Arrival (Percent Avg Bars Size)**

Minimum price difference between the zone and the first opposing level

* **Base Num Candles**

Number of similar sized candles to be considered as a base (Default 2)

* **Base Extra Candle - Timeframe**

Timeframe at which we require another candle to be added to be a valid base (Default H1)

* **Base Extra Candle – Additional Tolerance**

Additional tolerance for the base detection when we have extra candles

* **Base Tolerance - Consolidation**

Max percentage difference for two bar sizes to be considered a consolidation

### ========== Other Parameters ==========

* **Instance Id**

Unique Id (only modify if you need to use multiple instances per chart)

* **High Low Deviation**

Number of points a price has to exceed before it breaks an existing level (Default 1)

* **Retouch Deviation**

Number of points a price has to move to exit a level (Default 2)

* **Zone Gap Deviation**

Minimum number of points between levels (Default 0)

* **Risk Percent (Lotsize Calculation)**

Percentage of Equity to be used when calculating the lot size for the level

* **Recalculate Min Move (User Ticks)**

Minimum price move before the levels are recalculated

* **Backtest Mode Expire Time (mins)**

Set the number of minutes to wait before cancelling backtest mode (0 = no limit) (Default 30)

* **Max Bars**

Restrict the number of bars to use (Default 0 = all bars)

* **Info Text Size**

Set the size of the information text displayed next to each level

* **Info Text Colour**

Set the colour of the information text

* **Info Text Font**

Set the font for the information text

* **Info Custom Format**

Configure your own text to be displayed next to each level when the “custom” text info option is selected.

The following substitution variables can be interspersed with your own text

{high} - High Price

{low} - Low Price

{date} - Zone formation date

{time} - Zone formation time

{type}{typeLong} - Type of level (peak,consolidation,drop-base-drop)

{size0} {size1}{size2} - Zone size in user ticks (choice of three precisions)

{lots1}{lots2}{lots3} - Lot size of level including buffer for risk percent (choice of three precisions)

{score} - Strength engine score e.g. 8/10

{sA}{sB}{sC}{sD}{sE}{sF}{sG0} - Breakdown of Strength engine inputs (7 separate variables)

{avgSize0} {avgSize1} {avgSize2} - Average size of candles at time of formation (3 precisions)

{lf} - Line feed

* **Tooltips**

Choose the information to be displayed in the tooltips when the mouse hovers at the edge of the level

1. Hidden
2. High, Size, Lots, Low
3. High, Size, Lots, Strength, Low
4. High, Size, Lots, Strength, Scoring, Low
5. High, Date, Low
6. High, Date, Size, Lots, Low
7. High, Date, Size, Lots, Strength, Low
8. High, Date, Size, Lots, Strength, Scoring, Low
9. Custom – User defined string with substitutions

* **Tooltips Custom Format**

Configure your own tooltip to be hovered next to each level when the “custom” tooltip option is selected

See “Info Custom Format” above for substitution variables that can be interspersed with your own text

* **Hot Keys Map**

Allows the user to re-assign the hot-keys

“H” Hot-Keys

“C” Clear

“R” Reset

“Q” QPoints

“S” Summary

“W” With Trend

“D” Detection

“O” Overlaps

“I” Info

“P” Prices

“U” Left Info

“X” Xtend Box

“Z” Zone style (solo timeframe only)

“F” Flip Prices

“B” Backtest

“1” Timeframe 1

“2” Timeframe 2

“3” Timeframe 3

* **Cache State**

Choose the mode for the performance cache. (Default Enabled)

* **Optimise Trend Break Levels**

Set the optimisation level for trend analysis (lower is faster, 3 is the minimum)

* **GMT Offset – Use Daylight Savings**

Adjust the time by 1 hour if your local computer has switched to daylight savings mode. For brokers that switch their clocks in March/September

* **GMT Offset**

Manual GMT offset in seconds. Set this if your chart time doesn’t match your expectations of the current session time.