

PCF's for TC2000 and TCNet Users

3 MAJOR SIGNALS

Volume I:

The Doji

The Kicker

**The Bullish and Bearish Engulfing
Pattern**

A Candlestick Forum publication – Years of Candlestick Analysis made available in concise formats. Information that when learned and understood will revolutionize and discipline your investment thinking.

Copyright @ by Stephen W. Bigalow 2002

Published by The Candlestick Forum L.L.C.

PCF's for Major Signals

PCF's For Individual Candlestick Signals

The PCF's (Personal Criteria Formulas) for Candlestick signals are excellent search parameters for high profit trades. Knowing how a Candlestick signal is formed, combined with using a formula, enhances the knowledge of the physical structure of the signal. Searches requiring the appearance of specific signals can be pinpointed using the program. The TC2000 search software provides instantaneous results.

Once the proper formula is entered into TC2000's search program, an investor will greatly reduce the time required to search for specific trades. As a matter of fact, the investor will usually have many more high profit potential trades than they will need for any given time period. This creates a whole new dynamic when the investor is ready to commit funds to the market. An investor can fine-tune many confirming indicators against a number of potential trades to zero in on the best possible trade. This is completely opposite to investment management philosophies of approximately a decade ago. Instead of investment situations having to be sought out with an extensive amount of elbow grease, the supply is such that the many opportunities have to be honed down to a reasonable amount.

This book will be directed towards the most influential signals. The Doji, the most recognized signal, has great trend implications. The Kicker Signal has the most pronounced demonstration of change in investor sentiment. The Bullish and Bearish Engulfing patterns both have clear and powerful change of trend characteristics.

Keep in mind that the utilization of individual searches is *not* the most effective or efficient method for finding the best trades on a daily basis. The book titled **"Using TC2000 to Find the Best Candlestick Trades"** has a better process for getting to the most profitable trades in a hurry. It is the opinion of the Candlestick Forum staff that the search process from this book is the most effective. However, when a specific pattern is required, for whatever reason, knowing how to design the search criteria supplies an immense advantage. And in keeping with the underlying philosophy of Candlestick analysis, to impose upon any investor to use an investment process is exactly the opposite of what is intended. Decades upon decades of "common" investment truisms conveyed by the Wall Street crowd have led to many years of unimpressive returns. But it has made the Wall Street community billions of dollars.

You are going to find that each signal is extremely easy to formulate. You will also find that the formulas follow a "common sense" approach. To refresh your memory, the full description of each signal will be re-presented in this book. Along with the description will be the formulas for searching for each signal.

Create Your Own Destiny

Each e-book in this series will consist of three separate signals. This is to allow investors to add more criteria to searches. The Candlestick Forum will suggest parameters to make the search productive. Fortunately, we are in an age of computer technology that provides new information and software capabilities as we write this. This means that you, having the basics of a signal formula, have the opportunity to assemble combinations of criteria. Your testing of criteria, based upon logical assumptions, may have the potential to produce high percentage trade results.

The Japanese rice traders experienced results that made them wealthy beyond all common expectations. Their wealth, created from the statistical results of observing high probability reversal signals, became legendary. This was accomplished without the use of any sophisticated calculating equipment, just simple graphic charts. You have the advantage, after learning the basic formulas, for developing successful signals to further enhance those results. The capabilities of today's computing systems, and the continuous improvements being made on almost a daily basis, give anybody the opportunity to devise a combination of viable criteria that produces an extraordinary set of results.

Simply put, the formulas that you will be able to load into your TCNet or TC2000 software programs will appear very simple. What you are able to do to the results after you have the basics could be a major revelation for producing unheard of returns. Try everything, have fun with it!

THE DOJI

(Doji Bike)

DOJI STAR



Figure 1 – 1

Description

The Doji is always comprised of one candle. The Japanese say when a Doji occurs, one should always take notice. It is one of the most important Candlestick signals. The formation is created when the opening price and closing price are the same. This forms a horizontal line. The implication is that the bulls and the bears are in a state of indecision. It is an important alert at both the top and bottom of trends. At the top of a trend, the Doji signals a reversal without needing confirmation. The rule of thumb is that you should close a long or go short immediately.

However, the Doji occurring during the downtrend requires a bullish day to confirm the Doji day. The Japanese explanation is that the weight of the market can still force the trend downwards.

The Doji is an excellent example of the Candlestick method having superior attributes compared to the Western bar charting method. The deterioration of a trend is not going to be as apparent when viewing standard bar charts.

Criteria

1. The open and the close are the same or very near the same.
2. The length of the shadow should not be excessively long, especially when viewed at the end of a bullish trend.

Signal Enhancements

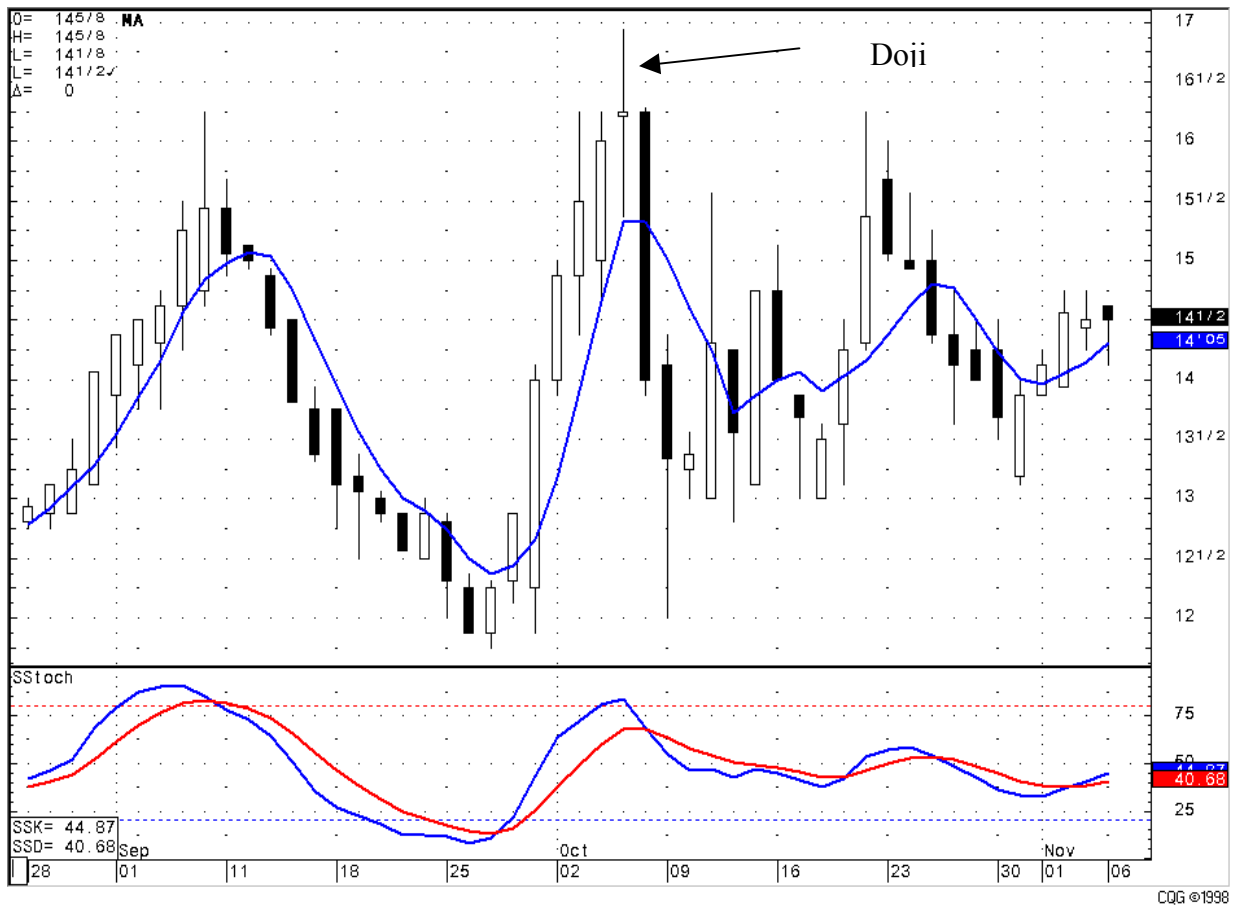
1. A gap away from the previous day's close sets up for a stronger reversal move.
2. Large volume on the signal day increases the chances that a blowoff day has occurred, although it is not a necessity.

- It is more effective after a long candle body, usually an exaggerated daily move compared to the normal daily trading range seen in the majority of the trend.

Pattern Psychology

After an uptrend or a downtrend has been in effect, the Doji occurring immediately reveals that there is now indecision in the bull's and the bear's camp. After the trend move and the price opens at a level, the bulls and the bears move the price up and down during the day. By the end of the day, the price closes at or very close to the level that it opened. This state of equilibrium now has the controlling group in some doubt. The opposite group builds up confidence that the trend has lost steam.

Figure 1 - 2



THE DOJI'S

(Doji Bike)

THE LONG LEGGED DOJI (JUJI)

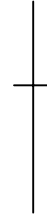


Figure 1 - 3

The Long Legged Doji is comprised of long upper and lower shadows. The price opened and closed in the middle of the trading range. Throughout the day, the price moved up and down dramatically before it closed at or very near the opening price. This reflects the great indecision that exists between the bulls and the bears. Juji means “cross.”

GRAVESTONE DOJI (TOHBA)

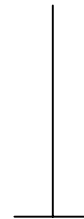


Figure 1 - 4

The Gravestone Doji is formed by the open and the close being at the low of the trading range. The price opens at the low of the day and rallies from there, but by the close the price is beaten back down to the opening price. The Japanese analogy is that it represents those who have died in battle. The victories of the day are all lost by the end of the day. A Gravestone Doji, at the top of the trend, is a specific version of the Shooting Star. At the bottom, it is a variation of the Inverted Hammer. The Japanese sources claim that the gravestone Doji can occur only on the ground, not in the air. This implication is that it works much better to show a bottom reversal than a top reversal. However, a Doji shows indecision no matter where it is found

THE DOJI'S

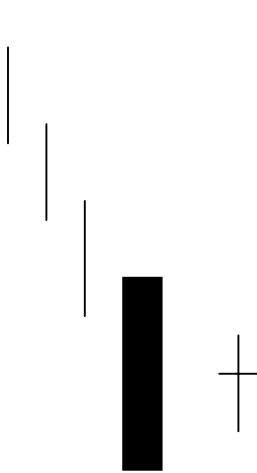
DRAGONFLY DOJI (TONBO)



Figure 1 - 5

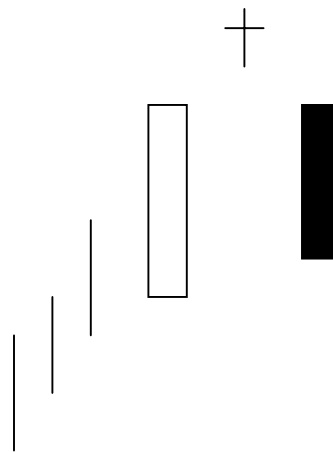
The Dragonfly Doji occurs when trading opens, trades lower, then closes at the open price which is the high of the day. At the top of the market, it becomes a variation of the Hanging Man. At the bottom of a trend, it becomes a specific Hammer. An extensively long shadow on a Dragonfly Doji at the bottom of a trend is very bullish.

Doji's that occur in multi-day patterns make those signals more convincing reversal signals.



Harami - Doji

Figure 1 - 6



Morning Star - Abandoned Baby

Figure 1 - 7

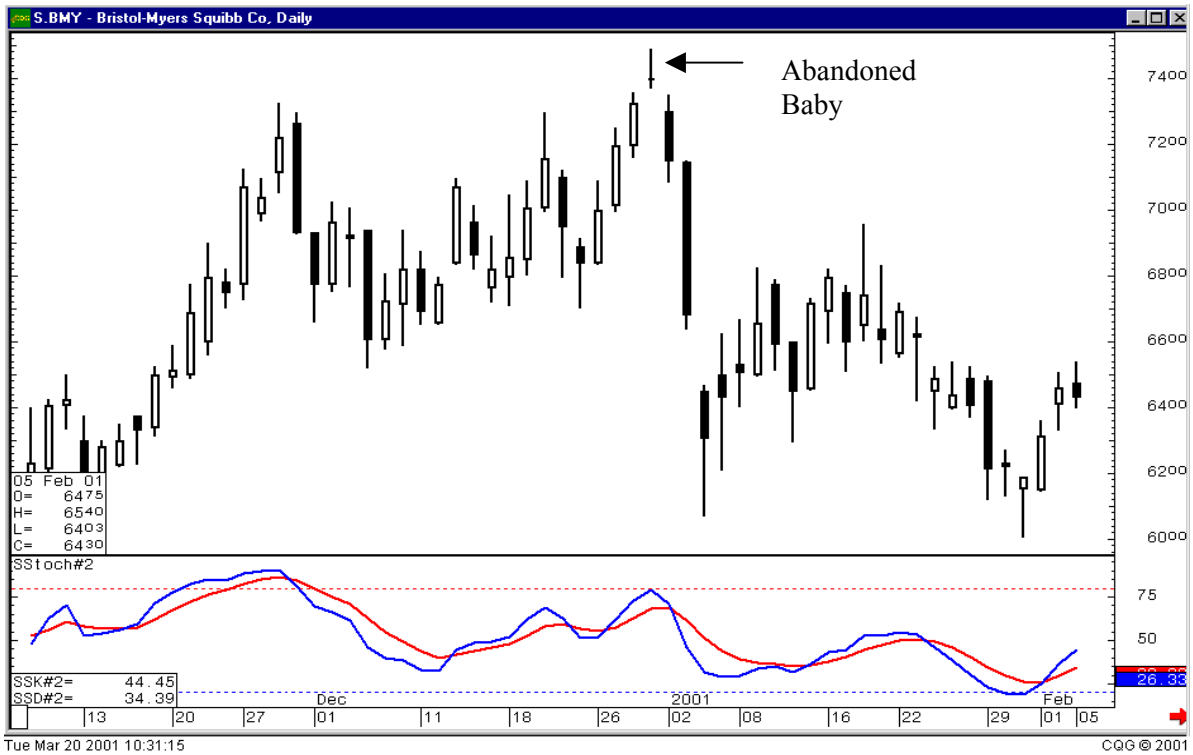


Figure 1 – 8 BMY reversed on a powerful Abandoned Baby pattern, a strong reversal signal.

Figure 1 - 9 Compuware Corp's rally started and ended with Doji's.



Figure 1 - 10 The Doji/Harami stopped Metromedia Fiber Network's downtrend.



The Doji Formula

The search for the Doji formations should be the most important search. The Doji has the highest number of important decision-making appearances of all the Candlestick signals. As discussed previously, the Japanese say to always take notice of a Doji.

The Doji has the simplest of formulas. It requires a formula that shows that the close of the day is the same as the open. In TC2000 notation, this is represented as

$$(O=C)$$

But remember, the signal alone does not mean that a meaningful reversal has occurred. The Candlestick Forum searches try to narrow down the universe of stocks that are reasonably tradeable. "Tradeable" is defined as all stocks trading above \$5.00 per share. This parameter is in effect due to the potential of margining. Most brokerage firms will not margin stocks trading below \$5.00.

$$C1>5$$

Next, we are interested in stocks that are easy to get into and out of, i.e., liquidity. Most investors will want at least 200,000 shares to be trading each day.

V>2000

This number is expressed as units of 100 on TC2000. The price and volume parameters will reduce the universe of 9,900 stocks down to 1,900 to 2,700, depending on the conditions of the markets. This will search the New York Stock Exchange, American Stock Exchange and NASDAQ stocks.

The limitation of finding stocks that closed exactly where they opened may be too restrictive for producing a suitable number of potential trades. A Doji formation can be stretched to having the open and the close very close together and still denote a day of indecision between the bulls and the bears. A more encompassing, yet as effective search would use a formula that indicates positions that opened and closed with a small difference between the open and close. That formula being:

$$(ABS(O-C) \leq ((H-L) * 0.1))$$

The next consideration involves where the trading is occurring in reference to the stage of the trading. Searching for the bottom reversal would include requiring the Stochastics to be in the oversold area. This is a standard setting on the TC2000 system. When adding Stochastics to this EasyScan search, the Stochastics settings employ a sliding scale. This allows the investor to set it at the range best suited for their search. Wanting to be alerted to Doji's at the bottom of the market, the Stochastics scale can be set at 20 or below. This obviously represents stocks that have been moving in a downward direction for a while. Conversely, finding Doji's at the top means setting the Stochastics scale at 80 and greater.

Doji's at the Bottom

- 1. C>5**
- 2. V>2000**
- 3. Stochastics short term – H Set scale to 20 and below**
- 4. C=O**

This set of parameters will give the pure Doji search results. It may produce one or two candidates each day. However, adding the formula for the "almost" Doji may result in three to eight candidates each day.

- 5. (ABS(O-C) \leq ((H-L) * 0.1))**

Doji's at the Top

1. $C > 5$
2. $V > 2000$
3. **Stochastics short term – H Set scale to 80 and above**
4. $C = O$ or $(ABS(O - C) \leq ((H - L) * 0.1))$

If this search is performed each night, the result of the trend change can be monitored prior to the open the next day. In the example of the overbought Doji, if the bid/ask is lower before the open of the next trading day (this can be observed with the TCNet program) you will know to sell immediately. If you witness a higher open, you will be prepared to put a sell stop, to close an open position, at the close of the Doji day. The rationale being that if the price opened higher after the Doji and it came back down through the close of the previous day, that would be good evidence that the sellers were taking over control.

As for the Doji's at the bottom, that list can be assembled before the next day's open. If there is a list of three to ten stocks that formed a Doji or "near" Doji after an extended downtrend, the list should be scrutinized about ten minutes before the next day's open. Remember, the Doji followed by a gap up (see our e-book "**Big Profits Using Candlestick Signals And Gaps**") is the best foreteller of a strong rally starting. Before the open the next day, look for positions that show an upward move in the bid and ask prices. That is the position to buy aggressively (see our e-book "**Profitable Candlestick Entry and Exit Strategies**"). The information about what to look for when establishing or closing a trade can increase your portfolio substantially by identifying the strong movers from the weak movers.

There will be nothing to stop your research, using TC2000 or TCNET, to expand upon criteria that can fine-tune the search. The Candlestick Forum is currently back-testing the results of many criteria combinations in order to better identify which combinations of parameters produce the highest probabilities of being correct and producing the strongest profit moves.

The Kicker Signal

The Candlestick Forum is a strong advocate of the Kicker Signal. Although more rare than the majority of the Candlestick signals, its appearance has very profitable implications. We put it into the category of a “major” signal because of the results found in the aftermath of a Kicker.

KICKER SIGNAL

(Keri Ashi)

KICKER

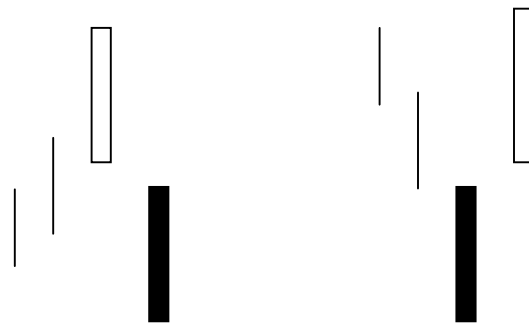


Figure 2 – 1

Description

The Kicker Signal is the most powerful signal of all. It works equally well in both directions. Its relevance is magnified when occurring in the overbought or oversold area. It is formed by two candles. The first candle opens and moves in the direction of the current trend. The second candle opens at the same open of the previous day, a gap open, and heads in the opposite direction of the previous day’s candle. The bodies of the candles are opposite colors. This formation is indicative of a dramatic change in investor sentiment. The candlesticks visually depict the magnitude of the change.

Criteria

1. The first day’s open and the second day’s open are the same. The price movement is in opposite directions from the opening price.
2. The trend has no relevance in a Kicker situation.
3. The signal is usually formed by surprise news before or after market hours.
4. The price never retraces into the previous day’s trading range.

Signal Enhancements

1. The longer the candles, the more dramatic the price reversal.
2. Opening from yesterday's close to yesterday's open already is a gap. However, gapping away from the previous day's open further enhances the reversal.

Pattern Psychology

The Kicker Signal demonstrates a dramatic change in investor sentiment. Something has occurred to violently change the direction of the price. Usually a surprise news item is the cause of this type of move. The signal illustrates such a big change in the current direction that the new direction will persist with strength for a good while.

There is one caveat to this signal. If on the next day prices gap back the other way, liquidate the trade immediately. This does not happen very often, but when it does, get out immediately.

Figure 2 - 2



The Kicker Formula

The Kicker Signal is usually created by a surprise announcement. The position of the signal in the trend is not important. The important factor is that a severe change of investor sentiment has occurred. Again, using the same universe of stocks, stocks above \$5 a share and trading more than 200,000 shares a day, the pertinent criteria formula is relatively simple. Because the Kicker Signal is a two-day signal, two opposite elements are required. First, in a bullish Kicker Signal, the predominant trend should have been downward. The first day would have opened, traded down, then closed lower than where it opened.

$$(O1 > C1)$$

Day two should have opened equal to or above the open of day one and then closed higher than the open of day two.

AND (O=>O1) AND (C>O)

The results of this search can be sorted by finding the biggest percentage gainers. This will illustrate the biggest movers against the previous trading day. The bigger the move in the opposite direction, the more strength will be in the move. The list of potentials for any given search will include many small previous trading day ranges. Usually the list will not be so long that a run through all the potential signals should not take more than a couple of minutes at the most. Many of the search findings will be small, normal trend oscillations. The true Kicker Signals will be evident.

Do not let the magnitude of a Kicker reversal signal deter you from making the trade. The announcement or event that created the Kicker Signal in that stock is not going to be a one-day affair. It has reversed the direction of investor sentiment. That was the surprise that the investment community reversed its outlook on. A big percentage move, that first day before you got in, is just a small part of the rest of the move.

Many investors will mistakenly wait for the price to pull back so that they can get in. The Candlestick investor does not want to see a pullback. The buyers should be maintaining their buying to make this trade a strong one. If a stock pulls back, the buying pressure may not be there to make this a strong up-move stock.

The bearish Kicker Signal has the opposite formulas. Of course the trend should be in a predominantly upward direction. Usually a bad news announcement will send the stock price crashing. The formula should be

(O1<C1)

The open on the following day is equal to or lower than the open of the previous day and continues down, closing lower than the open.

AND (O<=O1) AND (C<=O)

The more overbought when the signal started, the better. Again, the magnitude of the reversal is directly related to the strength that should be conveyed in the remaining portion of the new trend. Do not be afraid to participate in the move despite the magnitude of the initial move. Because the news was a surprise, it will take at least a few days, if not much longer, for the investment community to digest and assess the ramifications of the surprise.

The Kicker Signal is one, if not the only one, of the signals not needing any additional criteria to increase the credibility of the signal. The powerful change in the trend makes it an easy signal to become confident in.

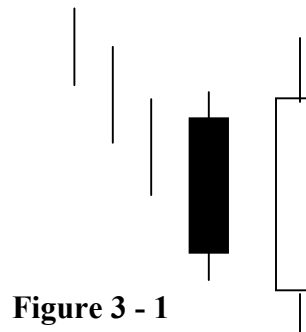
The Engulfing Patterns

The ease of identifying the Engulfing Patterns make them one of the most trusted of the Candlestick signals. That large white candle body becomes a neon sign after a long series of black candles. Especially when it engulfs the last black candle or two.

ENGULFING PATTERNS

(Tsutsumi)

BULLISH ENGULFING



Description

The Engulfing Pattern is a major reversal pattern comprised of two opposite colored bodies. The Bullish Engulfing Pattern (Figure 3 - 2) is formed after a downtrend. It opens lower than the previous day's close and closes higher than the previous day's open. Thus, the white candle completely engulfs the previous day's black candle. Engulfing can include either the open or the close being equal to the open or close of the previous day but not both.

Criteria

1. The body of the second day completely engulfs the body of the first day. Shadows are not a consideration.
2. Prices have been in a definable down trend, even if it has been short term.
3. The body of the second candle is opposite color of the first candle, the first candle being the color of the previous trend. The exception to this rule is when the engulfed body is a Doji or an extremely small body.

Signal Enhancements

1. A large body engulfing a small body. The previous day was showing the trend running out of steam. The large body shows that the new direction has started with good force.
2. When the engulfing pattern occurs after a fast move down, there will be less supply of stock to slow down the reversal move. A fast move makes a stock price over-extended and increases the potential for profit taking.
3. Large volume on the engulfing day increases the chances that a blowoff day has occurred.
4. The engulfing body engulfing more than one previous body demonstrates power in the reversal.
5. If the engulfing body engulfs the body and the shadows of the previous day, the reversal has a greater probability of working.
6. The greater the open gaps down from the previous close, the greater the probability of a strong reversal.

Pattern Psychology

After a downtrend has been in effect, the price opens lower than where it closed the previous day. Before the end of the day, the buyers have taken over and moved the price above where it opened the day before. The emotional psychology of the trend has now been altered. See Figure 3 – 2.

Figure 3 - 2



ENGULFING PATTERNS

(tsutsumi)

BEARISH ENGULFING

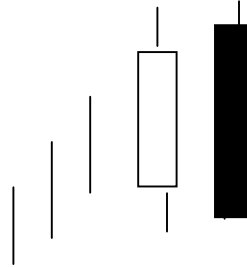


Figure 3 - 3

Description

The Bearish Engulfing pattern is a major reversal pattern comprised of two opposite colored bodies. The Bearish Engulfing Pattern (Figure 3 - 4) is formed after an uptrend. It opens higher than the previous day's close and closes lower than the previous day's open. Thus, the black candle completely engulfs the previous day's white candle. Engulfing can include either the open or the close be equal to the open or close of the previous day but not both.

Criteria

1. The body of the second day completely engulfs the body of the first day. Shadows are not a consideration.
2. Prices have been in a definable uptrend, even if it has been short term.
3. The body of the second candle is opposite color of the first candle, the first candle being the color of the previous trend. The exception to this rule is when the engulfed body is a Doji or an extremely small body.

Signal Enhancements

1. A large body engulfing a small body. The previous day was showing the trend was running out of steam. The large body shows that the new direction has started with good force.
2. When the engulfing pattern occurs after a fast spike up, there will less supply of stock to slow down the reversal move. A fast move makes a stock price over-extended and increases the potential for profit taking and a meaningful pullback.

3. Large volume on the engulfing day increases the chances that a blowoff day has occurred.
4. The engulfing body engulfing more than one previous body demonstrates power in the reversal.
5. If the engulfing body engulfs the body and the shadows of the previous day, the reversal has a greater probability of working.
6. The greater the open gaps up from the previous close, the greater the probability of a strong reversal.

Pattern Psychology

After an uptrend has been in effect, the price opens higher than where it closed the previous day. Before the end of the day, the sellers have taken over and moved the price below where it opened the day before. The emotional psychology of the trend has now been reversed.

Figure 3 - 4



The Bullish and Bearish Engulfing patterns are major signals because they occur often enough to produce good consistent returns. This signal would use the trading parameters that you would normally use. In our case, \$5.00 or greater stock price and over 200,000 shares per day.

The bullish formula for the engulfing signal is that the first day of the two-day pattern is an open that is greater than the close.

$$(O1 > C1)$$

The open on the second day is going to be lower than the close of the previous day and the close will be higher than the open of the previous day.

$$\text{AND } (O < C1) \text{ AND } (C > O1)$$

As can be easily assumed, the formula for the Bearish Engulfing pattern is the exact opposite. The last day of the uptrend would have an open lower than the close.

$$(C1 > O1)$$

Then the next day would have an open higher than the previous close and a close lower than the previous day's open.

$$\text{AND } (O > C1) \text{ AND } (C < O1)$$

These signals can be tweaked constantly to find the best combinations. Stochastics will play a very big part in finding the most profitable trades. The same settings pertain to finding the oversold and overbought positions as in the Doji. Other parameters can easily be tested to discover the combination of parameters that foretell the best up-move or down-move.

As in the Doji trades, the next day's open will give you valuable information on how strong the rally will be from the reversal signal area. Watch to see how the pre-market bid/ask level is. A slight gap up reveals that the buyers are still coming into the stock. A gap down from the Bearish Engulfing pattern reveals a resolve to get out of that stock fast. Utilize all the Candlestick common sense analysis to obtain the best possible results.

Conclusion

Knowing what the formulas are for each signal is an added aspect for remembering what they look like. Combining the physical make-up of the signals with the investment sentiment behind the formation of the signals provides a vivid image of what went into the make-up of each signal. The TC2000 software provides the opportunity to discover new and unfound search combinations that have not been attempted before. Use the program. You have the same potential for testing theories as the most sophisticated professionals on Wall Street. Find something new. You have an excellent start. The formulas put before you are the result of hundreds of years of statistical analysis.

You can find excellent trades as well as anybody can. Take the next step. Use your logic to cultivate a series of search programs that produce high probability trades. You have a multitude of research parameters at your fingertips. You could find the next close to perfect trades! Put the probabilities on your side!

Good Investing!

Stephen W. Bigalow

www.candlestickforum.com