



Ingenious Moving Average: Optimizing Technical Analysis

The Ingenious MA indicator is based on the adaptable filtration technologies, used in surveillance and observation systems. Use the indicator for suppressing undesirable fluctuations in Price Data. The Length parameter, defining the filtering period, is similar to the Length parameter in the moving averages, for example, in EMA. The sharpness influences the smoothness and its value is set as a value in the range from 1 to 10. The greater this parameter is, the lower will be the smoothness of the resulting data. The recommended value is 2 or 3.

Being a trader, you are probably familiar with the constant attempts to create the ideal Moving Average (MA), capable of sufficiently reducing excessive noise, have resulted in: the noise is still there.

However, not all the news is bad. Inspired by the tireless research, conducted by Kalman, Kaufman, Jurik and other talented market analysts, traders and scientists, the Tradecision research team refused to be disheartened by the situation. This perseverance was not in vain. Not that we have created something perfect. We have just managed to develop a noise-elimination filter that gives the trader a much better insight into the market situation, better than any other MA's we know - Ingenious Moving Average. Let us spare you the marketing mumbo-jumbo and get down to the facts by looking at several examples of Ingenious MA's performance.

The analysis will consider the filter's performance using the 3 main measurements of any MA's performance: accuracy, timeliness, and smoothness.

Accuracy

Since accuracy is responsible for how close to the original data a graph line produced by a moving average is, it is opposed to another of the 3 parameters – smoothness. The smoother the MA, the more loosely it reflects the original time series. Therefore, an accurate MA must ensure the most optimal correlation of the two parameters. In this respect, Ingenious MA eclipses any other MA in existence; this is illustrated by the example below.

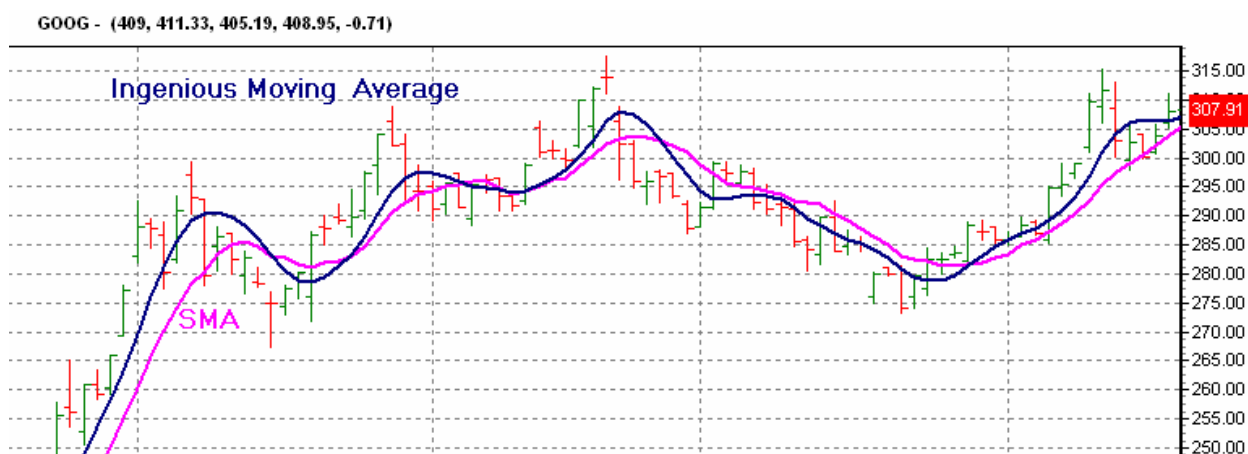


Figure 1: Comparing Ingenious MA and SMA indicators on a daily chart of Google (GOOG).

Timeliness

Another crucial aspect based on which any MA is evaluated, is the amount of lag it has. Using an MA significantly lagging behind the original time series can very easily result in you making late decisions and, thus losing your trades. Since a totally lag-free MA cannot exist even theoretically, Ingenious MA can be considered the MA with which the amount of lag is optimally reduced.

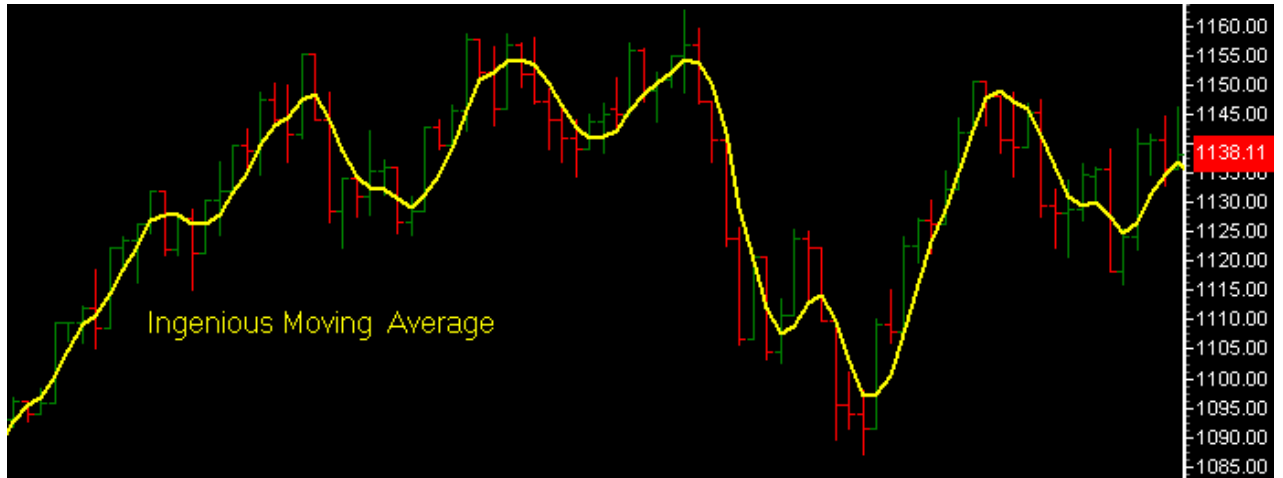


Figure 2: A daily chart of S&P 500 INDEX. Ingenious MA (Length: 10, Price: C, Sharpness: 2).

Smoothness

Undoubtedly, smoothness is considered the most important performance factor, simply because any kind of filter intended for removing noise must also make your graph optimally smooth. As we have already mentioned above, smoothness is countered by accuracy, and ensuring an optimally high level of smoothness without sacrificing the accuracy of an MA is the key obstacle. We have met that crucial challenge head on with much success. The following chart illustrates the ability of Ingenious MA to find the most optimal smoothness level possible.

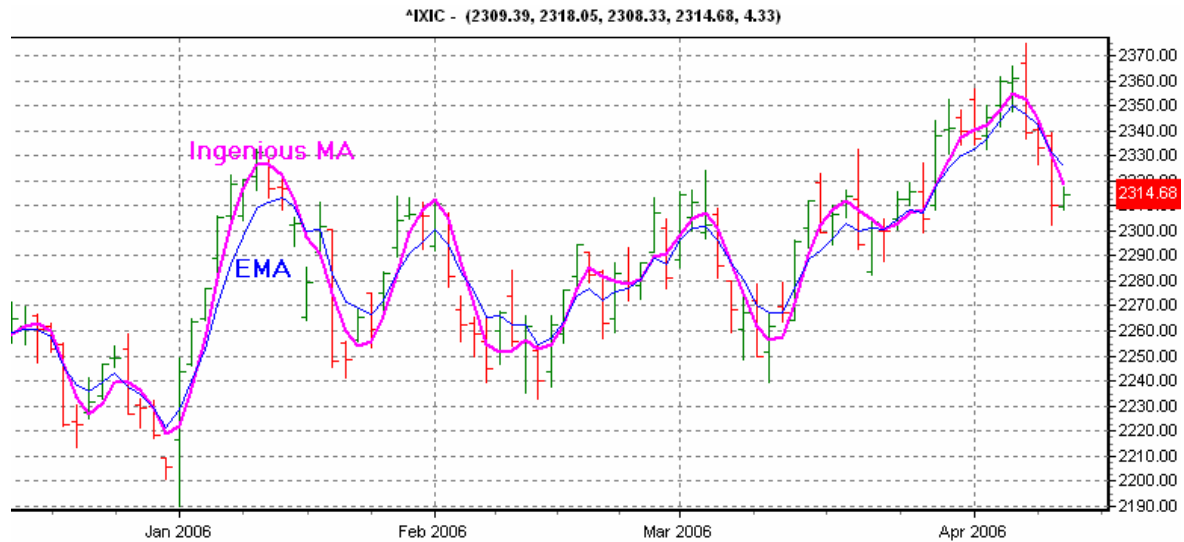


Figure 3: A daily chart of NASDAQ COMPOSITE (^IXIC).