

Hull Average

The Hull Moving Average solves the age old dilemma of making a moving average more responsive to current price activity whilst maintaining curve smoothness. In fact the HMA almost eliminates lag altogether and manages to improve smoothing at the same time.



The HMA manages to keep up with rapid changes in price activity whilst having superior smoothing over an SMA of the same period. The HMA employs weighted moving averages and dampens the smoothing effect (and resulting lag) by using the square root of the period instead of the actual period itself.

Formula

$$\text{WMA}(2 \times \text{WMA}(\text{Price}, \text{Integer}(\text{Period}/2)) - \text{WMA}(\text{Price}, \text{Period}), \text{Integer}(\text{SquareRoot}(\text{Period})))$$