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VWAP Exhaustion Fade

Expert Advisor Documentation

PLATFORM	TYPE	TIMEFRAME	WEBSITE
MetaTrader 5 (MT5)	Mean Reversion (Intraday VWAP Fade)	M5 – M15 (Intraday)	www.algobot.live

> ⚠ **Important Disclaimer** This document is for educational and informational purposes only. It does not constitute financial or investment advice. Trading forex, CFDs, and other leveraged instruments involves substantial risk of loss and is not suitable for all investors. Past backtest performance does not guarantee future results. Never trade with capital you cannot afford to lose.

Overview

VWAP Exhaustion Fade is an intraday mean-reversion Expert Advisor that combines the **session Volume-Weighted Average Price (VWAP)** with the **Relative Strength Index (RSI)**. Within any trading session, price is repeatedly pulled back toward its volume-weighted average — the institutional fair-value benchmark. The EA waits for those moments when price has stretched an unusually large, **ATR-scaled distance away from VWAP** and RSI is simultaneously reading an exhaustion extreme. When a confirming reversal candle then prints, the move is treated as statistically over-extended and the EA **fades it back toward VWAP**.

Three conditions must align for an entry, which is what separates this approach from a naive deviation fade:

- **Distance:** the close must be at least `DeviationAtrMult × ATR` away from the session VWAP. Using ATR rather than a fixed pip count keeps the trigger adaptive to current volatility.
- **Exhaustion:** RSI must be at or beyond its oversold/overbought threshold, confirming momentum has burned out.
- **Reversal:** the just-closed bar must be a reversal candle (bullish for longs, bearish for shorts), giving timing confirmation rather than catching a falling knife.

The reward target is the reversion back to VWAP; the risk is a tight ATR-based stop placed just beyond the extreme. The EA trades **one position at a time** per magic number and acts only on **fully-closed bars**.

How It Works

Session VWAP Anchor

On every closed bar the EA accumulates a typical price `(High + Low + Close) / 3` weighted by tick volume, building a running session VWAP. The accumulators **reset at each new UTC calendar day**, so VWAP is always anchored to the current session and is not contaminated by prior days. A warm-up guard (`MinSessionBars`) prevents trading on the thin, noisy VWAP that exists in the first few bars of a session.

Indicator Inputs

- **ATR** (`AtrPeriod`) — measures current volatility; used to size both the deviation band and the protective stop.
- **RSI** (`RsiPeriod`) — momentum oscillator used to detect oversold/overbought exhaustion.
- **VWAP** — the session fair-value line that price is expected to revert toward.

Both indicators are read on the **last fully-closed bar (shift 1)**, never on the still-forming bar, so signals never repaint.

Entry Logic

Let `stretch = Close − VWAP` and `band = DeviationAtrMult × ATR`.

- **Long (fade up):** price is stretched far *below* VWAP (`stretch ≤ −band`), `RSI ≤ RsiOversold`, and the closed bar is a **bullish** candle (`Close > Open`). The EA buys at the ask.
- **Short (fade down):** price is stretched far *above* VWAP (`stretch ≥ band`), `RSI ≥ RsiOverbought`, and the closed bar is a **bearish** candle (`Close < Open`). The EA sells at the bid.

Exit Logic, Stop Loss & Take Profit

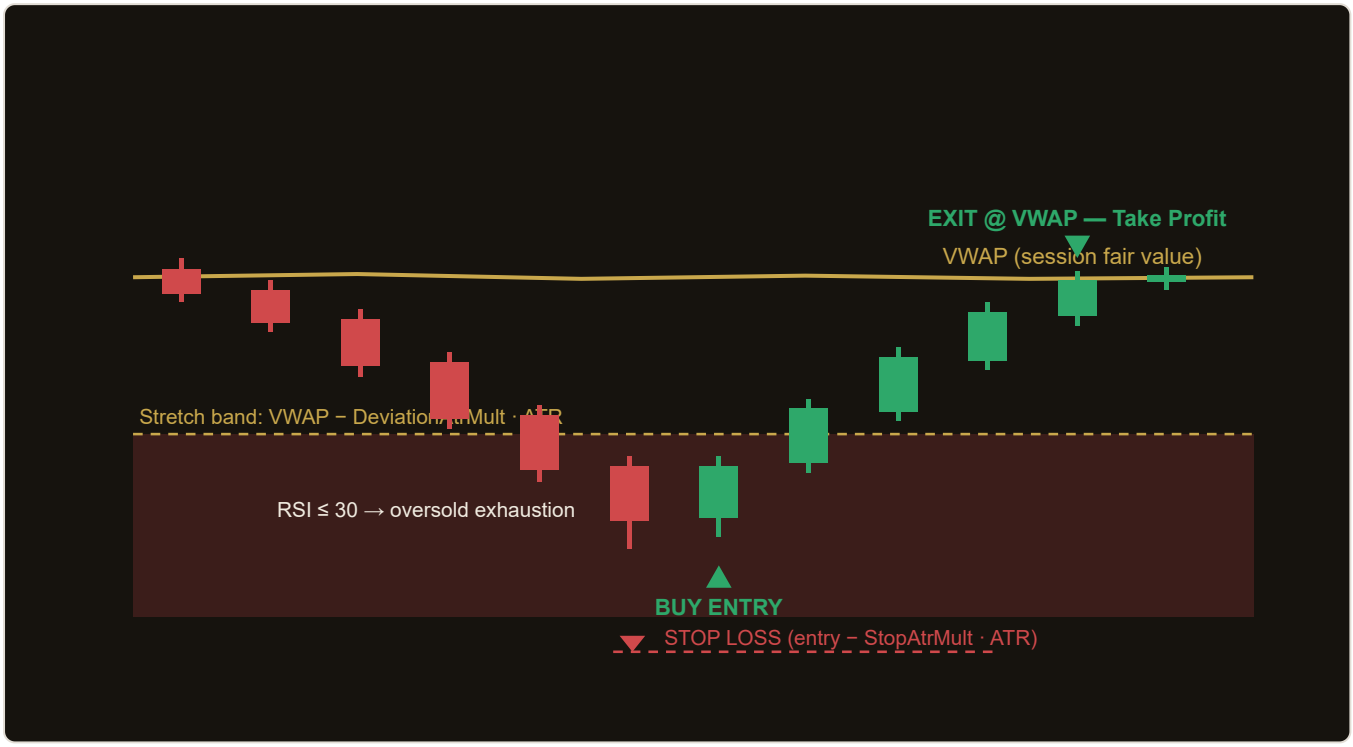
The EA places a fixed protective stop and a hard take-profit at order time, but its primary exit is the **reversion to VWAP**:

- **Stop loss:** `StopAtrMult × ATR` beyond the entry — below the ask for longs, above the bid for shorts.
- **Take profit (hard):** `TpAtrMult × ATR` in the direction of the trade, as a safety net.
- **VWAP reversion exit:** while a position is open, the EA closes a long once the **bid reaches VWAP**, and closes a short once the **ask reaches VWAP**. Because the entry was taken at an extreme distance from VWAP, closing at VWAP captures the mean-reversion move by construction.

> **Note — closed-bar discipline.** All signal evaluation happens on the bar that just closed (shift 1), detected via a new-bar check. Indicator buffers grow only from closed bars and are capped at 600 entries, so the strategy is memory-bounded and never reacts to an incomplete candle.

Strategy in Action

The illustration below shows an example of how the strategy identifies a setup and triggers its entry and exit. This is a simplified, illustrative example for educational purposes — not real market data.



Illustrative example only. Actual market behaviour varies.

Reading the chart

Price sells off in a string of red candles, stretching well below the dashed band (VWAP − k·ATR) into the shaded exhaustion zone while RSI hits oversold. A bullish reversal candle prints at the low — the **BUY ENTRY**. A stop is set just beyond the extreme, and the position is closed when price reverts up to the gold **VWAP** line, capturing the mean-reversion move.

Parameters

Parameter	Default	Description
RsiPeriod	`14`	RSI look-back period for the exhaustion filter. Range 5–30.
AtrPeriod	`14`	ATR look-back period used to size the deviation band and the stop. Range 5–30.
DeviationAtrMult	`1.6`	How far (in ATR multiples) price must stretch from VWAP before a fade is considered. Range 0.5–4.0.
RsiOversold	`30`	RSI level at or below which a long fade is allowed. Range 15–40.
RsiOverbought	`70`	RSI level at or above which a short fade is allowed. Range 60–85.
StopAtrMult	`1.4`	Protective stop distance in ATR multiples, placed just beyond the entry. Range 0.5–4.0.
TpAtrMult	`2.2`	Hard take-profit distance in ATR multiples (safety net behind the VWAP exit). Range 0.5–5.0.
MinSessionBars	`6`	Minimum number of closed bars into the session before any trade is allowed (VWAP warm-up). Range 1–40.
Lots	`0.10`	Fixed trade volume in lots. Range 0.01–1.0.
Magic	`1001`	Magic number identifying this EA's positions, so it manages only its own trades.

Recommended Settings

VWAP Exhaustion Fade is an **intraday** strategy and depends on a meaningful session VWAP, so it is best deployed on lower timeframes where multiple bars accumulate within a single UTC day.

- **Timeframe:** M5 to M15. Lower timeframes give VWAP more bars to stabilise and more fade opportunities per session.
- **Instruments:** liquid, mean-reverting intraday markets — major FX pairs (e.g. EUR/USD, GBP/USD) and index CFDs tend to respect VWAP well.
- **Sessions:** works best during active, liquid hours when tick volume is representative; thin overnight sessions weaken the VWAP signal.
- **Tuning:** raise `DeviationAtrMult` for fewer but higher-conviction fades; widen `RsiOversold` / `RsiOverbought` toward the extremes (e.g. 25/75) to demand stronger exhaustion.

Tip. Because the EA resets VWAP on each UTC calendar day, confirm your broker's server time / UTC offset. If sessions feel mis-aligned, the day boundary is the first thing to check, and consider increasing `MinSessionBars` so early-session noise is skipped.

Counter-trend risk. This is a fading strategy: it trades *against* the immediate move. In a strong, sustained trend or a news-driven breakout, price can keep extending away from VWAP without reverting. The ATR stop limits each loss, but avoid running the EA across major scheduled news events.

How to Install on MetaTrader 5

1. Copy `VWAPExhaustionFade.ex5` to your MT5 `MQL5\Experts\` folder
2. Restart MetaTrader 5 and refresh the Navigator panel
3. Drag the EA onto a chart matching the recommended symbol and timeframe
4. Configure the input parameters and click **OK**
5. Enable **Algo Trading** in the MT5 toolbar

Risk Warning

Trading foreign exchange, CFDs, and other leveraged financial instruments involves substantial risk of loss and is not suitable for all investors. The strategies and tools described in this document are provided for **educational purposes only** and do not constitute financial advice, investment recommendations, or solicitation to trade. Always consult a qualified financial adviser before making trading decisions. Past backtest performance is not indicative of future results.