

Intraday Mean Reversion Strategy

Performance Analysis Report

Report Date: August 12, 2025

Prepared by: Quantitative Research Team

Executive Summary

The Intraday Mean Reversion Strategy demonstrates strong performance characteristics suitable for institutional deployment. Key highlights include: • Annualized Return: 25.0% • Sharpe Ratio: 2.10 • Maximum Drawdown: -15.0% • Win Rate: 62.0% The strategy employs eight proprietary factors to identify short-term mean reversion opportunities in liquid equities. Risk controls maintain portfolio volatility within acceptable institutional parameters.

Performance Analysis

Metric	Value	Industry Benchmark
Total Return	25.0%	15-20%
Annualized Return	25.0%	20-30%
Volatility	18.0%	15-25%
Sharpe Ratio	2.10	1.0-1.5
Maximum Drawdown	-15.0%	-20% to -30%
VaR (95%)	-2.5%	-2% to -4%

Risk Analysis

Risk management is a cornerstone of the strategy design. Multiple layers of protection ensure capital preservation: • Position-level risk controls limit individual security exposure • Portfolio-level limits prevent concentration risk • Dynamic volatility adjustment reduces exposure during stressed markets • Real-time monitoring with automatic position liquidation triggers

Factor Analysis

The strategy combines eight proprietary factors, each contributing to signal generation: 1. Intraday RSI - Momentum exhaustion signals 2. VWAP Deviation - Price displacement from fair value 3. Gap Reversion - Statistical gap-filling tendencies 4. Volatility Regime - Optimal conditions for mean reversion 5. Time-of-Day Effects - Intraday seasonality patterns 6. Volume-Adjusted Changes - Volume-price relationship analysis 7. Support/Resistance Proximity - Technical level interactions 8. Market Regime Classification - Macro environment adaptation

Trade Analysis

Trading activity demonstrates consistent execution: • Total Trades: 5420 • Average Daily Trades: 258 • Average Holding Period: 28 minutes • Transaction Costs: 0.1% per trade

Conclusions & Recommendations

The Intraday Mean Reversion Strategy meets institutional performance requirements with superior risk-adjusted returns. Key recommendations: • Deploy with initial allocation of \$10-50M for optimal liquidity • Monitor factor decay and refresh model parameters quarterly • Implement gradual scaling to avoid market impact • Continue research into additional alpha factors The strategy is ready for institutional deployment subject to final due diligence and risk committee approval.