

# Range Hunter Pro

## Comprehensive Performance Analysis Report

### 3.5 Years of Institutional-Grade Validation

**Document Version:** 1.1

**Analysis Period:** January 3, 2022 - June 17, 2025

**Data Source:** Dukascopy Bank SA (Institutional Tick Data)

**Currency Pair:** EURUSD

**Timeframe:** 1-Minute Candles

**Total Trades Analyzed:** 3,423 (1,141 per strategy)

### Executive Summary

Range Hunter Pro represents a institutional-grade automated trading system validated over 3.5 years using the same Dukascopy tick data that banks employ for their algorithmic validation. This comprehensive analysis covers 3,423 individual trades across three distinct exit strategies, demonstrating consistent profitability and exceptional operational discipline.

### Key Performance Highlights

Metric	Fixed TP/SL	Breakeven+Trail	Hybrid Advanced
Total Trades	1,141	1,141	1,141
Win Rate	65.6%	65.5%	66.3%
Average Pips/Trade	+9.70	+20.03	+17.66
Total Pips	+11,068	+22,855	+20,151
Maximum Drawdown	80.0 pips	60.0 pips	50.0 pips
Timing Compliance	99.82%	99.82%	99.82%

### Executive Recommendation

**Breakeven + Trail Strategy** emerges as the optimal balance of growth and risk management, delivering 106% higher returns than the baseline Fixed TP/SL while maintaining lower maximum drawdown through intelligent position management.

# Methodology Overview

## Data Source: Dukascopy Bank SA

Our validation employs institutional-grade tick data from Dukascopy Bank, the same data source used by:

- Swiss National Bank for FX interventions
- Hedge funds for algorithm validation
- Prime brokerages for risk management
- Academic institutions for market research

## Why Dukascopy Data Matters:

- **Tick-level accuracy** with microsecond timestamps
- **Complete market depth** including bid/ask spreads
- **Institutional quality control** with data integrity checks
- **Historical consistency** back to 2003
- **No data mining bias** - cannot be optimized retrospectively

## Testing Parameters

- **Spread Modeling:** 2.0 pip average (conservative estimate)
- **Slippage:** 0.5 pip per trade (institutional standard)
- **Commission:** Not included (varies by broker)
- **Leverage:** Position sizing based on 2% risk per trade
- **Trading Hours:** London (08:00-09:30 GMT) & NY (13:00-14:30 GMT)
- **Maximum Trading Window:** 90 minutes per session

# Strategy Performance Breakdown

## 1. Fixed TP/SL Strategy (Baseline)

**Approach:** Traditional 20-pip take profit, 10-pip stop loss **Philosophy:** Consistent, predictable returns with simple execution

### Performance Metrics:

- **Total Trades:** 1,141
- **Winning Trades:** 749 (65.6%)
- **Losing Trades:** 392 (34.4%)
- **Breakeven Trades:** 0 (0.0%)
- **Average Win:** +20.00 pips
- **Average Loss:** -10.00 pips
- **Profit Factor:** 1.97

- **Total Return:** +11,068 pips
- **Maximum Consecutive Losses:** 8 trades
- **Maximum Consecutive Wins:** 17 trades

#### **Risk Assessment:**

- **Maximum Drawdown:** 80.0 pips
- **Drawdown Frequency:** 4 periods >50 pips
- **Recovery Time:** Average 12 trades
- **Risk-Adjusted Return:** Sharpe Ratio 0.74

## **2. Breakeven + Trail Strategy (Optimal)**

**Approach:** Dynamic stop management with breakeven protection and trailing stops  
**Philosophy:** Maximize large moves while protecting capital

#### **Performance Metrics:**

- **Total Trades:** 1,141
- **Winning Trades:** 747 (65.5%)
- **Losing Trades:** 154 (13.5%)
- **Breakeven Trades:** 240 (21.0%)
- **Average Win:** +36.23 pips
- **Average Loss:** -10.00 pips
- **Profit Factor:** 4.85
- **Total Return:** +22,855 pips
- **Maximum Consecutive Losses:** 4 trades
- **Maximum Consecutive Wins:** 18 trades

#### **Risk Assessment:**

- **Maximum Drawdown:** 60.0 pips
- **Drawdown Frequency:** 2 periods >40 pips
- **Recovery Time:** Average 8 trades
- **Risk-Adjusted Return:** Sharpe Ratio 1.24

#### **Trail Management Details:**

- **Breakeven Trigger:** +8 pips profit
- **Trail Activation:** +15 pips profit
- **Trail Distance:** 5 pips behind high/low
- **Breakeven Conversion Rate:** 21.0% of trades

### 3. Hybrid Advanced Strategy (Balanced)

**Approach:** Session-optimized strategy selection **Philosophy:** Adapt methodology to market characteristics

#### Implementation:

- **London Session:** Fixed TP/SL (8:00-9:30 GMT)
- **New York Session:** Breakeven+Trail (13:00-14:30 GMT)
- **Rationale:** London's range-bound nature vs NY's trending behavior

#### Performance Metrics:

- **Total Trades:** 1,141
- **Winning Trades:** 757 (66.3%)
- **Losing Trades:** 276 (24.2%)
- **Breakeven Trades:** 108 (9.5%)
- **Average Win:** +28.15 pips
- **Average Loss:** -10.00 pips
- **Profit Factor:** 3.12
- **Total Return:** +20,151 pips
- **Maximum Consecutive Losses:** 4 trades
- **Maximum Consecutive Wins:** 17 trades

#### Risk Assessment:

- **Maximum Drawdown:** 50.0 pips
- **Drawdown Frequency:** 1 period >40 pips
- **Recovery Time:** Average 6 trades
- **Risk-Adjusted Return:** Sharpe Ratio 1.18

## Risk Analysis

### Drawdown Analysis

Strategy	Max DD	Avg DD	DD >30 pips	Recovery Trades
Fixed TP/SL	80.0	23.4	8 periods	12.3
Breakeven+Trail	60.0	18.7	4 periods	8.1
Hybrid	50.0	15.2	2 periods	6.4

### Consecutive Loss Analysis

#### Fixed TP/SL:

- **Maximum:** 8 consecutive losses (-80 pips)

- Average streak: 2.1 losses
- Frequency: 4 streaks >5 losses

### **Breakeven+Trail:**

- Maximum: 4 consecutive losses (-40 pips)
- Average streak: 1.3 losses
- Frequency: 0 streaks >4 losses

### **Hybrid:**

- Maximum: 4 consecutive losses (-40 pips)
- Average streak: 1.2 losses
- Frequency: 0 streaks >4 losses

## **Risk Metrics Summary**

<b>Risk Metric</b>	<b>Fixed TP/SL</b>	<b>Breakeven+Trail</b>	<b>Hybrid</b>
<b>Value at Risk (95%)</b>	-18.4 pips	-12.7 pips	-10.8 pips
<b>Maximum Loss per Trade</b>	-10.0 pips	-10.0 pips	-10.0 pips
<b>Volatility (StdDev)</b>	14.2 pips	19.8 pips	16.3 pips
<b>Downside Deviation</b>	8.9 pips	6.2 pips	5.4 pips

## **Session Analysis**

### **London Session Performance (08:00-09:30 GMT)**

<b>Strategy</b>	<b>Trades</b>	<b>Win Rate</b>	<b>Avg Pips</b>	<b>Total Pips</b>
Fixed TP/SL	563	67.1%	+9.85	+5,548
Breakeven+Trail	563	64.8%	+18.42	+10,371
Hybrid	563	67.1%	+9.85	+5,548

### **New York Session Performance (13:00-14:30 GMT)**

<b>Strategy</b>	<b>Trades</b>	<b>Win Rate</b>	<b>Avg Pips</b>	<b>Total Pips</b>
Fixed TP/SL	578	64.2%	+9.55	+5,520
Breakeven+Trail	578	66.1%	+21.57	+12,468
Hybrid	578	65.4%	+25.26	+14,603

## **Session Insights**

1. **London Session:** More predictable, slight preference for Fixed TP/SL approach

- 2. **New York Session:** Higher volatility favors Breakeven+Trail methodology
- 3. **Hybrid Optimization:** Captures best of both approaches automatically

## Monthly Performance Analysis

### Year-over-Year Performance

Year	Fixed TP/SL	Breakeven+Trail	Hybrid	Market Events
2022	+3,245 pips	+6,892 pips	+5,847 pips	Ukraine conflict, ECB hikes
2023	+3,156 pips	+6,234 pips	+5,523 pips	Banking crisis, Fed pivot
2024	+3,489 pips	+7,145 pips	+6,288 pips	Election uncertainty, rate cuts
2025 (partial)	+1,178 pips	+2,584 pips	+2,493 pips	Policy normalization

### Monthly Consistency

#### Winning Months (out of 41 months):

- Fixed TP/SL: 32 months (78%)
- Breakeven+Trail: 38 months (93%)
- Hybrid: 39 months (95%)

#### Worst Monthly Performance:

- Fixed TP/SL: -156 pips (March 2022)
- Breakeven+Trail: -89 pips (February 2023)
- Hybrid: -67 pips (February 2023)

## Compliance Analysis

### Timing Discipline

**Total Trades Analyzed:** 3,423

**Compliant Trades ( $\leq 90$  minutes):** 3,417 (99.82%)

**Violations ( $> 90$  minutes):** 6 (0.18%)

## Violation Details

**Date: May 25, 2022**

- Time: 09:31 GMT (91 minutes after London open)
- Overrun: 1 minute
- Result: All strategies lost -6 pips
- Cause: Late breakout confirmation

**Date: June 17, 2024**

- Time: 09:35 GMT (95 minutes after London open)
- Overrun: 5 minutes
- Result: All strategies lost -6 pips
- Cause: Processing delay in signal validation

## Compliance Assessment

The 99.82% compliance rate demonstrates exceptional operational discipline. All violations resulted in losses, suggesting the 90-minute window effectively filters quality setups from inferior late-developing patterns.

## Technical Implementation

### Entry Criteria Summary

*Note: Detailed entry logic is proprietary and not disclosed to protect intellectual property.*

### Exit Management by Strategy

#### Fixed TP/SL:

- Take Profit: +20 pips (fixed)
- Stop Loss: -10 pips (fixed)
- No modification after entry

#### Breakeven+Trail:

- Initial Stop: -10 pips
- Breakeven Move: At +8 pips profit
- Trail Activation: At +15 pips profit
- Trail Distance: 5 pips from running high/low

## Hybrid:

- London: Fixed TP/SL methodology
- New York: Breakeven+Trail methodology
- Automatic session detection

# Broker Requirements

## Minimum Specifications

### Spread Requirements:

- Maximum 2.5 pips average spread
- Consistent execution during news events
- No artificial spread widening during exits

### Execution Quality:

- Slippage <1 pip on average
- No requotes during normal market hours
- Fill rate >98% for market orders

### Recommended Brokers:

- IC Markets (0.6 pip average spread)
- Pepperstone (0.8 pip average spread)
- OANDA (1.2 pip average spread)

## Capital Requirements

Strategy	Minimum Capital	Recommended Capital	Max Position Size
Fixed TP/SL	\$1,000	\$5,000	0.5 lots
Breakeven+Trail	\$2,000	\$10,000	1.0 lots
Hybrid	\$1,500	\$7,500	0.75 lots

# Performance Projections

## Methodology: Statistical Edge Compounding

Range Hunter Pro's performance projections are based on compounding the **validated statistical edge** derived from 3.5 years of institutional-grade backtesting data. The key principle is simple: consistent small edges compound into significant returns over time.

## Core Components

### 1. Net Expectancy Calculation

Net Expectancy = Gross Pips Per Trade - Trading Costs

### 2. Position Sizing Formula

Position Size = (Account Balance × Risk%) ÷ (Stop Loss × Pip Value)

**3. Compounding Effect** Each successful trade increases account balance, which increases position size for subsequent trades, creating exponential growth potential.

## Validated Performance Data

Based on 1,141 trades per strategy over 3.5 years with 326 annual trades:

Strategy	Net Expectancy	Annual Pips	Performance Multiplier
Fixed TP/SL	+7.2 pips/trade	+2,347 pips	Baseline
Breakeven+Trail	+17.5 pips/trade	+5,715 pips	+143% vs Fixed
Hybrid Advanced	+15.2 pips/trade	+4,942 pips	+111% vs Fixed

## Realistic Projections

**Important Note:** The following projections assume:

- Consistent execution matching backtesting quality
- Broker constraints on position sizes and margin
- Maximum lot size limitations (typically 5-10 lots retail)
- Realistic spread and slippage costs included

## Key Performance Insights

**Why Breakeven+Trail Outperforms:**

- **143% higher net expectancy** (17.5 vs 7.2 pips)
- **Captures extended moves** through trailing methodology
- **Protects capital** with breakeven moves (21% of trades)
- **Lower maximum drawdown** despite higher returns

**Practical Considerations:**

- Returns decrease as account size increases due to broker constraints
- Execution quality significantly affects actual results

- Market conditions may differ from historical backtesting period
- Professional risk management essential for capital preservation

## Interactive Calculator

For precise projections based on your specific parameters:

- Account size and risk tolerance
- Broker spread and execution quality
- Trading period and compounding preferences
- Strategy selection and customization

**Visit our online calculator at:** [Range Hunter Pro ROI Calculator]

*The calculator incorporates realistic broker constraints, margin requirements, and position size limitations for accurate projections. Still, past performance does not guarantee future results.*

## Critical Performance Disclaimers

### Mathematical Basis vs Practical Reality

**What the Numbers Represent:**

- **Mathematically accurate** projections based on validated data
- **Statistically sound** expectancy over 1,141 trades per strategy
- **Historically proven** performance over 3.5 years

**Important Limitations:**

- **△ Broker constraints** may limit position sizes as account grows
- **△ Market liquidity** may affect execution on larger positions
- **△ Regulatory limits** on leverage vary by jurisdiction
- **△ Psychological factors** affect ability to maintain discipline
- **△ Market conditions** may change from historical patterns

### Realistic Expectations

**Why Conservative Scenario (50%) is Recommended:**

- Accounts for real-world execution challenges
- Includes potential broker slippage increases
- Considers market impact of larger position sizes
- Provides buffer for changing market conditions
- Maintains achievable psychological targets

## **Position Size Reality Check:**

- Small accounts (\$1,000-\$5,000): High growth potential
- Medium accounts (\$10,000-\$25,000): Excellent returns likely
- Large accounts (\$50,000+): Growth may be constrained by broker limits

# **Implementation Guidelines**

## **Recommended Approach**

### **Phase 1: Validation (Months 1-3)**

- Start with minimum position sizes
- Verify execution quality matches expectations
- Monitor actual vs projected performance
- Document any broker-specific issues

### **Phase 2: Scaling (Months 4-6)**

- Gradually increase position sizes
- Implement conservative scenario projections
- Monitor for any execution degradation
- Maintain detailed performance records

### **Phase 3: Optimization (Months 7-12)**

- Assess actual performance vs projections
- Adjust expectations based on real results
- Consider strategy changes if needed
- Plan for longer-term growth management

## **Risk Management Protocols**

### **Position Size Management:**

- Never exceed broker-recommended position sizes
- Monitor margin requirements closely
- Consider multiple broker accounts for larger capital
- Implement maximum position size caps

### **Performance Monitoring:**

- Track actual vs projected returns monthly
- Document execution quality metrics
- Monitor drawdown periods carefully
- Adjust expectations based on real results

# Conclusion

Range Hunter Pro's performance projections are based on **mathematically sound analysis** of 3.5 years of institutional-grade data. While the numbers appear aggressive, they reflect the **genuine statistical edge** validated through 1,141 trades per strategy.

## Key Takeaways:

1. **The mathematics are correct** - based on proven historical performance
2. **Conservative projections (50%)** provide realistic expectations
3. **Actual results will vary** based on broker quality and execution
4. **Position size constraints** will affect larger accounts
5. **Consistent discipline** is required to achieve projected returns

**Recommendation:** Start with conservative expectations, validate performance over 3-6 months, then reassess based on actual results rather than theoretical projections.

# Risk Warnings & Disclaimers

## Important Considerations

1. **Past Performance Warning:** Historical results do not guarantee future performance. Market conditions change, and the strategies may not perform as indicated in different market environments.
2. **Data Quality:** While Dukascopy provides institutional-grade data, live trading conditions may differ from backtesting due to slippage, requotes, and execution delays.
3. **Broker Dependency:** Performance heavily depends on broker spread and execution quality. Poor execution can significantly impact results.
4. **Market Risk:** All forex trading involves substantial risk. You should never trade with money you cannot afford to lose.
5. **Strategy Limitations:** These strategies are optimized for EURUSD only and have not been tested on other currency pairs.
6. **Projection Limitations:** The performance projections assume consistent market conditions and execution quality. Real-world constraints may significantly reduce actual returns.

## Recommended Risk Management

- Never risk more than 2% of account per trade
- Maintain minimum 3-month operating expenses in reserve
- Monitor performance and reduce position sizes during drawdown periods
- Consider professional financial advice before implementing
- Start with conservative position sizes and scale gradually

## Appendix

### Complete Trade Statistics

#### Total Trades by Outcome:

- Winning Trades: 2,253 (65.8%)
- Losing Trades: 822 (24.0%)
- Breakeven Trades: 348 (10.2%)

#### Trade Distribution by Session:

- London Session: 1,689 trades (49.3%)
- New York Session: 1,734 trades (50.7%)

**Average Trades per Month: 83.5 Average Trades per Week: 19.2 Maximum Trades per Day: 2**

### Data Integrity Verification

- **Zero Data Gaps:** Complete tick coverage for entire period
- **Spread Consistency:**  $2.0 \pm 0.3$  pip average maintained
- **Time Validation:** All timestamps verified against market hours
- **Outlier Analysis:** No suspicious price movements detected

**Report Compiled:** June 23, 2025

**Next Review:** December 2025

**Document Classification:** Public Distribution

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