## **Hover Breakout Optimization**

## **Default Parameters**

Lookback: 2

Range Threshold (pips): 80

Stop Loss (pips): 9 Take Profit (pips): 30 Hold Period (bars): 6 Spread (pips): 2 Risk Per Trade: 0.01 Initial Equity: 10000.0

## **Parameter Grid Tested**

Lookback: [1, 2, 6, 8]

Range Threshold (pips): [10, 40, 80, 150]

Stop Loss (pips): [3, 9, 15, 30] Take Profit (pips): [10, 30, 40, 60] Hold Period (bars): [2, 12, 20, 30]

Risk Per Trade: [0.005, 0.01, 0.02, 0.05]

## **Top 50 Results**

- 1) Final Equity: 1434933.33, Max DD: -11.22%, Expectancy: 0.11%
- Lookback: 1, Range Threshold (pips): 80, Stop Loss (pips): 9, Take Profit (pips): 40, Hold Period (bars):
- 2, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 2) Final Equity: 1434161.11, Max DD: -11.22%, Expectancy: 0.11%
- Lookback: 1, Range Threshold (pips): 80, Stop Loss (pips): 9, Take Profit (pips): 60, Hold Period (bars):
- 2, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 3) Final Equity: 1433822.22, Max DD: -11.22%, Expectancy: 0.11%
- Lookback: 1, Range Threshold (pips): 150, Stop Loss (pips): 9, Take Profit (pips): 40, Hold Period
- (bars): 2, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 4) Final Equity: 1433050.00, Max DD: -11.22%, Expectancy: 0.11%
- Lookback: 1, Range Threshold (pips): 150, Stop Loss (pips): 9, Take Profit (pips): 60, Hold Period
- (bars): 2, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 5) Final Equity: 1429683.33, Max DD: -19.12%, Expectancy: 0.11%
- Lookback: 1, Range Threshold (pips): 80, Stop Loss (pips): 3, Take Profit (pips): 40, Hold Period (bars):
- 2, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 6) Final Equity: 1428350.00, Max DD: -19.12%, Expectancy: 0.11%
- Lookback: 1, Range Threshold (pips): 150, Stop Loss (pips): 3, Take Profit (pips): 40, Hold Period
- (bars): 2, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 7) Final Equity: 1412266.67, Max DD: -19.12%, Expectancy: 0.11%
- Lookback: 1, Range Threshold (pips): 40, Stop Loss (pips): 3, Take Profit (pips): 40, Hold Period (bars):
- 2, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0

- 8) Final Equity: 1400500.00, Max DD: -11.22%, Expectancy: 0.11% Lookback: 1, Range Threshold (pips): 40, Stop Loss (pips): 9, Take Profit (pips): 40, Hold Period (bars): 2, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 9) Final Equity: 1399116.67, Max DD: -11.22%, Expectancy: 0.11% Lookback: 1, Range Threshold (pips): 40, Stop Loss (pips): 9, Take Profit (pips): 60, Hold Period (bars): 2, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 10) Final Equity: 1395705.56, Max DD: -11.22%, Expectancy: 0.11% Lookback: 1, Range Threshold (pips): 80, Stop Loss (pips): 9, Take Profit (pips): 30, Hold Period (bars): 2, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 11) Final Equity: 1395550.00, Max DD: -19.12%, Expectancy: 0.11% Lookback: 1, Range Threshold (pips): 80, Stop Loss (pips): 3, Take Profit (pips): 60, Hold Period (bars): 2, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 12) Final Equity: 1394594.44, Max DD: -11.22%, Expectancy: 0.11% Lookback: 1, Range Threshold (pips): 150, Stop Loss (pips): 9, Take Profit (pips): 30, Hold Period (bars): 2, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 13) Final Equity: 1394500.00, Max DD: -49.44%, Expectancy: 0.11% Lookback: 1, Range Threshold (pips): 80, Stop Loss (pips): 9, Take Profit (pips): 40, Hold Period (bars): 12, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 14) Final Equity: 1394216.67, Max DD: -19.12%, Expectancy: 0.11% Lookback: 1, Range Threshold (pips): 150, Stop Loss (pips): 3, Take Profit (pips): 60, Hold Period (bars): 2, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 15) Final Equity: 1393388.89, Max DD: -49.44%, Expectancy: 0.11% Lookback: 1, Range Threshold (pips): 150, Stop Loss (pips): 9, Take Profit (pips): 40, Hold Period (bars): 12, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 16) Final Equity: 1390822.22, Max DD: -49.44%, Expectancy: 0.11% Lookback: 1, Range Threshold (pips): 80, Stop Loss (pips): 9, Take Profit (pips): 60, Hold Period (bars): 12, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 17) Final Equity: 1389711.11, Max DD: -49.44%, Expectancy: 0.11% Lookback: 1, Range Threshold (pips): 150, Stop Loss (pips): 9, Take Profit (pips): 60, Hold Period (bars): 12, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 18) Final Equity: 1382166.67, Max DD: -19.12%, Expectancy: 0.11% Lookback: 1, Range Threshold (pips): 80, Stop Loss (pips): 3, Take Profit (pips): 30, Hold Period (bars): 2, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 19) Final Equity: 1380833.33, Max DD: -19.12%, Expectancy: 0.11% Lookback: 1, Range Threshold (pips): 150, Stop Loss (pips): 3, Take Profit (pips): 30, Hold Period (bars): 2, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 20) Final Equity: 1377866.67, Max DD: -19.12%, Expectancy: 0.11% Lookback: 1, Range Threshold (pips): 40, Stop Loss (pips): 3, Take Profit (pips): 60, Hold Period (bars): 2, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 21) Final Equity: 1373166.67, Max DD: -19.12%, Expectancy: 0.11% Lookback: 1, Range Threshold (pips): 40, Stop Loss (pips): 3, Take Profit (pips): 30, Hold Period (bars): 2, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 22) Final Equity: 1368661.11, Max DD: -49.52%, Expectancy: 0.11% Lookback: 1, Range Threshold (pips): 80, Stop Loss (pips): 9, Take Profit (pips): 30, Hold Period (bars): 12, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0

- 23) Final Equity: 1368538.89, Max DD: -11.22%, Expectancy: 0.11% Lookback: 1, Range Threshold (pips): 40, Stop Loss (pips): 9, Take Profit (pips): 30, Hold Period (bars): 2, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 24) Final Equity: 1367550.00, Max DD: -49.52%, Expectancy: 0.11% Lookback: 1, Range Threshold (pips): 150, Stop Loss (pips): 9, Take Profit (pips): 30, Hold Period (bars): 12, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 25) Final Equity: 1358650.00, Max DD: -49.44%, Expectancy: 0.11% Lookback: 1, Range Threshold (pips): 40, Stop Loss (pips): 9, Take Profit (pips): 40, Hold Period (bars): 12, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 26) Final Equity: 1347866.67, Max DD: -49.44%, Expectancy: 0.11% Lookback: 1, Range Threshold (pips): 40, Stop Loss (pips): 9, Take Profit (pips): 60, Hold Period (bars): 12, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 27) Final Equity: 1338900.00, Max DD: -49.52%, Expectancy: 0.11% Lookback: 1, Range Threshold (pips): 40, Stop Loss (pips): 9, Take Profit (pips): 30, Hold Period (bars): 12, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 28) Final Equity: 1319750.00, Max DD: -84.52%, Expectancy: 0.12% Lookback: 1, Range Threshold (pips): 80, Stop Loss (pips): 9, Take Profit (pips): 60, Hold Period (bars): 20, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 29) Final Equity: 1318922.22, Max DD: -84.22%, Expectancy: 0.12% Lookback: 1, Range Threshold (pips): 80, Stop Loss (pips): 9, Take Profit (pips): 40, Hold Period (bars): 20, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 30) Final Equity: 1318638.89, Max DD: -84.52%, Expectancy: 0.12% Lookback: 1, Range Threshold (pips): 150, Stop Loss (pips): 9, Take Profit (pips): 60, Hold Period (bars): 20, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 31) Final Equity: 1317811.11, Max DD: -84.22%, Expectancy: 0.12% Lookback: 1, Range Threshold (pips): 150, Stop Loss (pips): 9, Take Profit (pips): 40, Hold Period (bars): 20, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 32) Final Equity: 1315805.56, Max DD: -87.32%, Expectancy: 0.12% Lookback: 1, Range Threshold (pips): 80, Stop Loss (pips): 9, Take Profit (pips): 30, Hold Period (bars): 20, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 33) Final Equity: 1314694.44, Max DD: -87.32%, Expectancy: 0.12% Lookback: 1, Range Threshold (pips): 150, Stop Loss (pips): 9, Take Profit (pips): 30, Hold Period (bars): 20, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 34) Final Equity: 1311577.78, Max DD: -82.02%, Expectancy: 0.11% Lookback: 1, Range Threshold (pips): 80, Stop Loss (pips): 9, Take Profit (pips): 40, Hold Period (bars): 30, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 35) Final Equity: 1310466.67, Max DD: -82.02%, Expectancy: 0.11% Lookback: 1, Range Threshold (pips): 150, Stop Loss (pips): 9, Take Profit (pips): 40, Hold Period (bars): 30, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 36) Final Equity: 1307866.67, Max DD: -85.18%, Expectancy: 0.11% Lookback: 1, Range Threshold (pips): 80, Stop Loss (pips): 9, Take Profit (pips): 30, Hold Period (bars): 30, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 37) Final Equity: 1306755.56, Max DD: -85.18%, Expectancy: 0.11% Lookback: 1, Range Threshold (pips): 150, Stop Loss (pips): 9, Take Profit (pips): 30, Hold Period (bars): 30, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0

- 38) Final Equity: 1295066.67, Max DD: -85.05%, Expectancy: 0.12% Lookback: 1, Range Threshold (pips): 80, Stop Loss (pips): 9, Take Profit (pips): 60, Hold Period (bars): 30, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 39) Final Equity: 1293955.56, Max DD: -85.05%, Expectancy: 0.12% Lookback: 1, Range Threshold (pips): 150, Stop Loss (pips): 9, Take Profit (pips): 60, Hold Period (bars): 30, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 40) Final Equity: 1284638.89, Max DD: -87.32%, Expectancy: 0.12% Lookback: 1, Range Threshold (pips): 40, Stop Loss (pips): 9, Take Profit (pips): 30, Hold Period (bars): 20, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 41) Final Equity: 1280477.78, Max DD: -84.22%, Expectancy: 0.12% Lookback: 1, Range Threshold (pips): 40, Stop Loss (pips): 9, Take Profit (pips): 40, Hold Period (bars): 20, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 42) Final Equity: 1277438.89, Max DD: -84.52%, Expectancy: 0.12% Lookback: 1, Range Threshold (pips): 40, Stop Loss (pips): 9, Take Profit (pips): 60, Hold Period (bars): 20, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 43) Final Equity: 1277438.89, Max DD: -85.18%, Expectancy: 0.11% Lookback: 1, Range Threshold (pips): 40, Stop Loss (pips): 9, Take Profit (pips): 30, Hold Period (bars): 30, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 44) Final Equity: 1273816.67, Max DD: -82.02%, Expectancy: 0.11% Lookback: 1, Range Threshold (pips): 40, Stop Loss (pips): 9, Take Profit (pips): 40, Hold Period (bars): 30, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 45) Final Equity: 1267533.33, Max DD: -27.33%, Expectancy: 0.14% Lookback: 2, Range Threshold (pips): 80, Stop Loss (pips): 3, Take Profit (pips): 40, Hold Period (bars): 2, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 46) Final Equity: 1267116.67, Max DD: -69.66%, Expectancy: 0.12% Lookback: 1, Range Threshold (pips): 80, Stop Loss (pips): 3, Take Profit (pips): 30, Hold Period (bars): 30, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 47) Final Equity: 1266300.00, Max DD: -65.86%, Expectancy: 0.12% Lookback: 1, Range Threshold (pips): 80, Stop Loss (pips): 3, Take Profit (pips): 40, Hold Period (bars): 30, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 48) Final Equity: 1265783.33, Max DD: -69.66%, Expectancy: 0.12% Lookback: 1, Range Threshold (pips): 150, Stop Loss (pips): 3, Take Profit (pips): 30, Hold Period (bars): 30, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 49) Final Equity: 1264966.67, Max DD: -65.86%, Expectancy: 0.12% Lookback: 1, Range Threshold (pips): 150, Stop Loss (pips): 3, Take Profit (pips): 40, Hold Period (bars): 30, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0
- 50) Final Equity: 1260200.00, Max DD: -27.33%, Expectancy: 0.14% Lookback: 2, Range Threshold (pips): 150, Stop Loss (pips): 3, Take Profit (pips): 40, Hold Period (bars): 2, Spread (pips): 2, Risk Per Trade: 0.05, Initial Equity: 10000.0