# **EICHERMOT Stock Analysis**

# **EMA 9/15 Crossover Strategy - Comprehensive Backtest Report**

Analysis Parameter	Value
Stock Symbol	EICHERMOT
Strategy Type	EMA 9/15 Crossover
Data Period	July 30, 2025 to September 10, 2025
Total Data Points	2,175 bars
Base Timeframe	5 minutes
Analysis Timeframes	15min, 30min
Risk:Reward Ratios	1:1, 1:2, 1:3
Stop Loss Types	Fixed, Trailing
Price Range	■5,400.0 - ■6,919.0
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### **■** Executive Summary

This comprehensive analysis examines EICHERMOT stock performance using EMA 9/15 crossover strategies across multiple configurations. We tested 12 different strategy combinations including various timeframes, risk-reward ratios, and stop-loss mechanisms.

**Key Findings:** 

Best Return: 15T Fixed 1:3 (4.13%)
Best Sharpe: 15T Fixed 1:3 (1.44)

Lowest Drawdown: 15T Fixed 1:1 (7.22%)
Best Win Rate: 15T Fixed 1:1 (34.4%)
Best Profit Factor: 15T Fixed 1:3 (1.32)

### **■** Complete Strategy Comparison

Configuration	Timeframe	Stop Typ€	isk:Rew <b>ā</b> ī	odal Return (	Sonarpe RM ta	x Drawdown\	(1%) Rate (%	) Trades I	Profit FactB	est TradeWA	á <b>)</b> st Trade (	(%Final Equit
15T Fixed 1:1	15T	Fixed	1:1	-0.97	0.08	-7.22	34.4	32	0.94	5.08	-1.26	99030
15T Trailing 1:1	15T	Trailing	1:1	2.84	1.1	-8.93	28.1	32	1.23	4.74	-1.4	102842
15T Fixed 1:2	15T	Fixed	1:2	0.36	0.55	-7.34	28.1	32	1.03	5.08	-1.26	100362
15T Trailing 1:2	15T	Trailing	1:2	2.84	1.1	-8.93	28.1	32	1.23	4.74	-1.4	102842
15T Fixed 1:3	15T	Fixed	1:3	4.13	1.44	-7.33	28.1	32	1.32	5.08	-1.26	104128
15T Trailing 1:3	15T	Trailing	1:3	2.84	1.1	-8.93	28.1	32	1.23	4.74	-1.4	102842
30T Fixed 1:1	30T	Fixed	1:1	-10.05	-10.9	-10.87	16.7	18	0.18	0.81	-1.4	89947
30T Trailing 1:1	30T	Trailing	1:1	-6.32	-3.06	-12.19	16.7	18	0.63	5.48	-4.07	93676
30T Fixed 1:2	30T	Fixed	1:2	-6.79	-5.04	-9.37	16.7	18	0.46	2.53	-1.4	93211
30T Trailing 1:2	30T	Trailing	1:2	-6.32	-3.06	-12.19	16.7	18	0.63	5.48	-4.07	93676
30T Fixed 1:3	30T	Fixed	1:3	-4.61	-2.69	-9.12	16.7	18	0.63	2.81	-1.4	95387
30T Trailing 1:3	30T	Trailing	1:3	-6.32	-3.06	-12.19	16.7	18	0.63	5.48	-4.07	93676

### ■ Performance Analysis by Categories

### **Timeframe Comparison**

Timeframe	otal Return (%	Sharpe Rati <b>d</b>	ax Drawdown (ʻ	<b>∜W</b> in Rate (%)	Trades	Profit Factor
15T	2.01	0.90	-8.11	29.15	32.00	1.16
30T	-6.74	-4.64	-10.99	16.70	18.00	0.53

### **Risk:Reward Ratio Comparison**

Risk:Reward	Total Return (%	Sharpe Rati <b>M</b>	ax Drawdown ( <sup>c</sup>	<b>∜</b> Win Rate (%)	Trades	Profit Factor
1:1	-3.63	-3.20	-9.80	23.98	25.00	0.74
1:2	-2.48	-1.61	-9.46	22.40	25.00	0.84

1.2	-0.99	-0.80	-9.39	22.40	25.00	0.95
1.5	-0.99	-0.00	-9.59	22.40	23.00	0.95

# **Stop Loss Type Comparison**

Stop Type	Total Return (%	Sharpe Rati <b>M</b>	ax Drawdown (ʻ	% <b>)</b> Win Rate (%)	Trades	Profit Factor
Fixed	-2.99	-2.76	-8.54	23.45	25.00	0.76
Trailing	-1.74	-0.98	-10.56	22.40	25.00	0.93

# ■ Time Period Performance Analysis

# **Daily Performance Analysis**

Configuration	avg_daily_return	daily_volatility	best_day	worst_day	positive_days_pc
15T Fixed 1:1	0.01	1.08	4.86	-2.67	23.81
15T Trailing 1:1	0.09	1.18	3.25	-2.67	33.33
15T Fixed 1:2	0.04	1.16	4.84	-2.66	28.57
15T Trailing 1:2	0.09	1.18	3.25	-2.67	33.33
15T Fixed 1:3	0.13	1.28	4.70	-2.68	30.95
15T Trailing 1:3	0.09	1.18	3.25	-2.67	33.33
30T Fixed 1:1	-0.25	0.72	1.13	-2.81	11.90
30T Trailing 1:1	-0.15	1.26	2.82	-4.74	21.43
30T Fixed 1:2	-0.16	0.85	2.19	-2.83	14.29
30T Trailing 1:2	-0.15	1.26	2.82	-4.74	21.43
30T Fixed 1:3	-0.11	0.96	2.49	-2.82	16.67
30T Trailing 1:3	-0.15	1.26	2.82	-4.74	21.43

### **Weekly Performance Analysis**

Configuration	vg_weekly_retur	weekly_volatility	best_week	worst_week p	ositive_weeks_p
15T Fixed 1:1	-0.14	3.20	4.96	-3.72	33.33
15T Trailing 1:1	0.44	3.17	3.41	-4.26	66.67
15T Fixed 1:2	-0.03	3.36	5.30	-4.16	33.33
15T Trailing 1:2	0.44	3.17	3.41	-4.26	66.67
15T Fixed 1:3	0.43	3.69	6.05	-4.18	50.00
15T Trailing 1:3	0.44	3.17	3.41	-4.26	66.67
30T Fixed 1:1	-1.35	1.79	0.19	-4.07	33.33
30T Trailing 1:1	-0.09	2.81	4.57	-3.48	33.33
30T Fixed 1:2	-0.77	1.80	1.24	-3.36	33.33
30T Trailing 1:2	-0.09	2.81	4.57	-3.48	33.33
30T Fixed 1:3	-0.38	2.22	2.21	-3.36	33.33
30T Trailing 1:3	-0.09	2.81	4.57	-3.48	33.33

# **Monthly Performance Analysis**

Configuration a	vg_monthly_retui	nonthly_volatility	best_month	worst_monthpo	sitive_months_p
15T Fixed 1:1	0.34	4.32	3.40	-2.71	50.00
15T Trailing 1:1	1.94	4.77	5.31	-1.43	50.00
15T Fixed 1:2	1.04	5.19	4.71	-2.63	50.00
15T Trailing 1:2	1.94	4.77	5.31	-1.43	50.00

15T Fixed 1:3	2.91	4.88	6.36	-0.55	50.00
15T Trailing 1:3	1.94	4.77	5.31	-1.43	50.00
30T Fixed 1:1	-4.50	6.47	0.08	-9.07	50.00
30T Trailing 1:1	-2.49	9.98	4.57	-9.55	50.00
30T Fixed 1:2	-2.82	5.34	0.96	-6.60	50.00
30T Trailing 1:2	-2.49	9.98	4.57	-9.55	50.00
30T Fixed 1:3	-1.69	5.29	2.05	-5.44	50.00
30T Trailing 1:3	-2.49	9.98	4.57	-9.55	50.00

### ■ Strategy Recommendations

#### Based on the comprehensive analysis, here are key recommendations:

#### 1. Optimal Configuration Selection:

- Choose configurations based on your risk tolerance and return objectives
- Consider the trade-off between higher returns and increased drawdown
- Monitor win rate alongside profit factor for consistency

#### 2. Timeframe Considerations:

- 15-minute timeframe may provide more trading opportunities
- 30-minute timeframe might reduce noise and false signals
- Consider your available time for monitoring positions

#### 3. Risk Management:

- Higher risk:reward ratios (1:3) can improve profit factor but may reduce win rate
- Trailing stops may capture more upside in trending markets
- Fixed stops provide clearer risk management

#### 4. Implementation Guidelines:

- Start with paper trading to validate signals
- Use proper position sizing (risk 1-2% of capital per trade)
- Monitor market conditions and adjust parameters accordingly
- Keep detailed trading logs for continuous improvement

#### **■■** Important Disclaimers:

- Past performance does not guarantee future results
- Market conditions can change strategy effectiveness
- Always use proper risk management and position sizing
- · Consider transaction costs in live trading

### ■ Methodology & Technical Details

#### **Strategy Components:**

- EMA 9: Fast exponential moving average (9 periods)
- EMA 15: Slow exponential moving average (15 periods)
- Entry Signal: EMA 9 crosses above/below EMA 15
- Exit Signal: Opposite crossover or stop-loss/take-profit hit

#### **Risk Management:**

- Fixed Stops: Predetermined stop-loss and take-profit levels
- Trailing Stops: Dynamic stop-loss that follows favorable price movement
- Risk Ratios: 1:1, 1:2, 1:3 risk-to-reward ratios tested
- Base Stop Loss: 1% of entry price

#### **Data Processing:**

- Base Data: 5-minute OHLCV bars
- Resampling: Aggregated to 15-minute and 30-minute timeframes
- Commission: 0.1% per trade (realistic brokerage assumption)
- Starting Capital: ■1,00,000

#### **Performance Metrics:**

- Total Return: Overall strategy performance vs buy-and-hold
- Sharpe Ratio: Risk-adjusted return measure
- Maximum Drawdown: Largest peak-to-trough decline
- Win Rate: Percentage of profitable trades
- Profit Factor: Gross profit divided by gross loss

• Calmar Ratio: Annual return divided by maximum drawdown

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Analysis Framework: backtesting.py

Stock: EICHERMOT

**Strategy:** EMA 9/15 Crossover **Configurations Tested:** 12

**Report Version:** 1.0