In August 2013, we created the ROBO Global® Robotics & Automation Index for the investment and research community. We aim to provide investors with a comprehensive, transparent, and diversified benchmark representative of the global value chain of robotics, automation, and enabling technologies.

1. **INDUSTRY EXPERTS** specializing in robotics, artificial intelligence (AI), and healthcare technologies whose mission is to define and identify the universe of robotics and automation for investors.

2. **GLOBAL EXPOSURE** to the value chain of robotics, automation, and AI companies, across developed and emerging markets.

3. **MULTI-CAP** index providing diversified access to large-, mid- and small-cap companies with minimal overlap with most broad market indices.

**INDEX FACTS**

- **Go Live Date**: August 02, 2013
- **Index Components**: 82
- **Eligible Universe**: ROBO Global® Industry Classification
- **Weighting**: Modified equal weighting including revenue purity and market/technology leadership
- **Rebalance Frequency**: Quarterly
- **Calculation Frequency**: Every 15 seconds (9am to 11:30pm GMT)
- **Dividend Treatment**: Price and total return (calculated with net dividends reinvested) versions are available
- **History Availability**: Daily back to December 31, 2002
- **Base Value / Base Date**: 1000 / August 02, 2013
- **Bloomberg / Reuters Ticker**: ROBO Index / .ROBO

**INDUSTRY CLASSIFICATION**

To date, we have identified 11 subsectors of suitable product and technology maturity to the robotics and automation theme. These subsectors carry high growth and earnings potential. We regularly screen our database to identify companies that are publicly traded, meet a minimum robotics revenue threshold, are positioned as technology and growth leaders, and satisfy our ESG Policy. Index members are identified in accordance with our predetermined rules and objective criteria, including minimum market capitalization and average daily value traded. The result is a unique mix of technology and applications companies.

- **Application**
  - Manufacturing & Industrial: 57%
  - Logistics Automation: 14%
  - Healthcare: 13%
  - Food & Agriculture: 13%
  - Business Process Automation: 5%
  - 3D Printing: 4%
  - Autonomous Systems: 2%

- **Technologies**
  - Computing & AI: 43%
  - Actuation: 14%
  - Sensing: 13%
  - Integration: 6%
The coverage team incorporates full-time financial and research professionals supported by industry entrepreneurs and academic leaders. These strategic advisors specialize in global developments in robotics, artificial intelligence, and healthcare technologies. The team includes 7 PhDs and some of the industry’s most highly respected technology visionaries.

**Characteristics**
- Annualized Return*: 16.16%
- Annualized Volatility*: 18.03%
- Information Ratio*: 0.90
- Trailing P/E: 23.17
- Forward P/E: 24.48
- Price/Book: 3.52
- Price/Cash Flow: 27.52
- Average Market Cap ($MM): 22,842
- Median Market Cap ($MM): 5,321

*Includes back-tested data prior to 2013-08-02

**Top Holdings**
- Harmonic Drive Systems Inc: 2.55%
- IRobot: 2.45%
- Rockwell Automation Inc: 1.86%
- Intuitive Surgical Inc: 1.78%
- KarDEX Holding AG: 1.76%
- Fanuc: 1.76%
- Novanta Inc: 1.70%
- TeCan Group AG: 1.67%
- Keyence: 1.66%
- National Instruments: 1.60%
- Total: 18.81%

**Methodology**
Each company in the ROBO Global® Industry Classification System is assigned a “ROBO Score” based on the company’s level of revenues, market and technology leadership, and investments in the field of robotics and automation. These scores range from 1-100 with 100 representing significant levels of revenues and leadership. A company must have a minimum ROBO Score of 50 to be considered for inclusion in the index. Companies are weighted by dividing each individual company’s ROBO Score by the sum of the total ROBO Scores among index constituents. To respond to new entrants and maintain the desired diversification, the index rebalances on a quarterly basis.

**Performance**
Rebased to 100 on 2002-12-31; includes back-tested data prior to 2013-08-02

**Yearly Performance**
- Year: 2022
  - Jan: -11.64%
  - Feb: -3.22%
  - Mar: -1.87%
  - Apr: -13.46%
  - May: 0.21%
  - Jun: -11.52%
  - Jul: 12.46%
  - Aug: -5.98%
  - Sep: —
  - Oct: —
  - Nov: —
  - Dec: -31.91%
- Year: 2021
  - Jan: 6.33%
  - Feb: 0.93%
  - Mar: -2.60%
  - Apr: 1.94%
  - May: -1.11%
  - Jun: 2.15%
  - Jul: 0.80%
  - Aug: 2.64%
  - Sep: -4.00%
  - Oct: 5.99%
  - Nov: -0.66%
  - Dec: 3.28%
  - YTD: 16.26%
- Year: 2020
  - Jan: -1.16%
  - Feb: -7.40%
  - Mar: -12.48%
  - Apr: 15.39%
  - May: 9.52%
  - Jun: 2.17%
  - Jul: 5.49%
  - Aug: 5.46%
  - Sep: -0.56%
  - Oct: 0.24%
  - Nov: 16.81%
  - Dec: 8.47%
  - YTD: 45.32%
- Year: 2019
  - Jan: 11.26%
  - Feb: 6.41%
  - Mar: -0.08%
  - Apr: 7.51%
  - May: -12.75%
  - Jun: 10.27%
  - Jul: -3.61%
  - Aug: -5.27%
  - Sep: 4.94%
  - Oct: 3.91%
  - Nov: 3.97%
  - Dec: 2.85%
  - YTD: 30.28%
- Year: 2018
  - Jan: 9.58%
  - Feb: -5.29%
  - Mar: -2.32%
  - Apr: -3.30%
  - May: 2.40%
  - Jun: -2.99%
  - Jul: 1.89%
  - Aug: 4.66%
  - Sep: -1.93%
  - Oct: -13.16%
  - Nov: 1.66%
  - Dec: -11.33%
  - YTD: -20.27%
- Year: 2017
  - Jan: 6.24%
  - Feb: 3.32%
  - Mar: 2.13%
  - Apr: 3.05%
  - May: 4.65%
  - Jun: -0.89%
  - Jul: 5.70%
  - Aug: 1.85%
  - Sep: 5.03%
  - Oct: 5.17%
  - Nov: 3.09%
  - Dec: -0.94%
  - YTD: 45.50%
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