

# Machine Vision - Company Evaluation Report, 2025

<https://marketpublishers.com/r/M21F0FC83EB0EN.html>

Date: August 2025

Pages: 131

Price: US\$ 2,650.00 (Single User License)

ID: M21F0FC83EB0EN

## Abstracts

The Machine Vision Companies Quadrant is a comprehensive industry analysis that provides valuable insights into the global market for Machine Vision. This quadrant offers a detailed evaluation of key market players, technological advancements, product innovations, and industry trends. MarketsandMarkets 360 Quadrants evaluated over 112 companies, of which the Top 12 Machine Vision Companies were categorized and recognized as quadrant leaders.

Machine vision is the technology that provides imaging-based automatic inspection and analysis for industrial automation. It enables a computer to "see" and interpret visual information by using one or more digital cameras, specialized lighting, and intelligent software to capture and process images. A machine vision system analyzes these images to perform specific tasks such as detecting defects, measuring parts, reading barcodes and text, identifying products, and guiding robotic arms. This allows for automated, high-speed decision-making with a degree of precision and consistency that far exceeds human capabilities.

The primary driver for the machine vision market is the manufacturing sector's unceasing demand for higher quality, increased throughput, and greater automation. In industries from automotive and electronics to food and pharmaceuticals, machine vision is essential for 100% quality control on fast-moving production lines, ensuring products meet specifications and reducing costly waste. The rise of Industry 4.0 and smart factories, which rely on data for process optimization, has further fueled demand. The technology's application is also rapidly expanding into logistics, agriculture, and intelligent transportation systems.

Despite its powerful capabilities, implementing machine vision can be challenging. The performance of a system is highly sensitive to variables like lighting conditions, part orientation, and surface reflectivity, requiring expert design and integration to ensure

robust operation. The initial investment in high-resolution cameras, advanced lighting, and powerful processing hardware can be substantial. There is also a persistent shortage of skilled engineers with the expertise to develop, deploy, and maintain these complex systems. For AI-driven vision, the need to collect and label large, high-quality datasets for model training can also be a significant barrier.

The 360 Quadrant maps the Machine Vision companies based on criteria such as revenue, geographic presence, growth strategies, investments, and sales strategies for the market presence of the Machine Vision quadrant. The top criteria for product footprint evaluation included Component (Cameras, Optics, Frame Grabbers, Processors, LED Lighting, Other Hardware Components, Software), Industry (Automotive, Consumer Products, Electronics & Semiconductors, Printing, Metals, Logistics, Food & Beverages, Rubber & Plastics, Healthcare, Machinery, Solar Panel Manufacturing, Other Industries), System Type (PC-based, Smart Camera-based), Vision Type (1D Vision System, 2D Vision System, 3D Vision System), Deployment (General and Robotics Cell).

#### Key Players:

Major vendors in the Machine Vision market are Cognex Corporation (US), Basler AG (Germany), KEYENCE CORPORATION (Japan), Teledyne Technologies Inc. (US), and Omron Corporation (Japan). The key strategies major vendors implement in the Machine Vision market are partnerships, collaborations, product launches, and product enhancements.

#### KEYENCE CORPORATION

KEYENCE CORPORATION is a global leader in factory automation and inspection equipment, renowned for its innovative portfolio of sensors, machine vision systems, and high-precision measurement instruments. The company's core strategy is a unique direct-sales model, where its expert consultants solve complex manufacturing challenges directly on the factory floor. This approach, combined with relentless product innovation, allows KEYENCE to maintain exceptionally high profitability and a strong market position. This solidifies its role as a key partner in advancing global manufacturing efficiency and quality control in an era of increasing automation.

#### Teledyne Technologies Inc.

Teledyne Technologies is a leading global provider of sophisticated instrumentation,

digital imaging, and engineered systems. Built on a long-standing strategy of acquiring leaders in high-margin technology niches, most notably FLIR Systems, the company boasts a vast and diverse portfolio. Its products, ranging from thermal imaging cameras to advanced marine sensors, are critical to the aerospace, defense, industrial, and environmental monitoring sectors. By offering a wide array of advanced sensors and systems, Teledyne maintains its strong position as a key supplier of critical technologies for demanding, mission-critical applications worldwide.

## SICK AG

SICK AG is a world-leading manufacturer of intelligent sensors and solutions for industrial automation. Operating under the banner of “Sensor Intelligence,” the German company excels in embedding connectivity and processing power into its devices. Its extensive portfolio includes automation light grids, safety systems, and identification solutions that are foundational to modern factory and logistics automation. SICK’s strategy focuses on driving Industry 4.0 by enabling its sensors to provide critical data for process control, robotics, and predictive maintenance, solidifying its role as an essential partner for smart manufacturing.

## Contents

### 1 INTRODUCTION

#### 1.1 MARKET DEFINITION

#### 1.2 STAKEHOLDERS

### 2 EXECUTIVE SUMMARY

### 3 MARKET OVERVIEW

#### 3.1 INTRODUCTION

#### 3.2 MARKET DYNAMICS

##### 3.2.1 DRIVERS

3.2.1.1 Increasing demand for quality assurance and automated inspection in manufacturing industry

3.2.1.2 Rising adoption of vision-guided robotic systems across multiple industries

3.2.1.3 Growing emphasis on safety and improved product quality

3.2.1.4 Growing adoption of AI-powered systems across industries

##### 3.2.2 RESTRAINTS

3.2.2.1 Lack of awareness and high cost associated with machine vision systems

##### 3.2.3 OPPORTUNITIES

3.2.3.1 Rising adoption in food & beverage industry

3.2.3.2 Government-backed initiatives to support industrial automation

3.2.3.3 Emergence of compact smart cameras and processors

3.2.3.4 Surging demand for hybrid and EVs

##### 3.2.4 CHALLENGES

3.2.4.1 Complexities in integrating diverse machine vision components with traditional systems

3.2.4.2 Cyber vulnerabilities in industrial robotic systems

3.2.4.3 Lack of skilled workforce to operate machine vision systems

#### 3.3 TRENDS/DISRUPTIONS IMPACTING CUSTOMER BUSINESS

#### 3.4 VALUE CHAIN ANALYSIS

#### 3.5 ECOSYSTEM ANALYSIS

#### 3.6 TECHNOLOGY ANALYSIS

##### 3.6.1 KEY TECHNOLOGIES

3.6.1.1 Robotic vision

3.6.1.2 AI in machine vision

##### 3.6.2 COMPLEMENTARY TECHNOLOGIES

- 3.6.2.1 5G
- 3.6.2.2 Edge computing
- 3.6.3 ADJACENT TECHNOLOGIES
  - 3.6.3.1 Cloud computing
- 3.7 PATENT ANALYSIS
- 3.8 KEY CONFERENCES AND EVENTS, 2025–2026
- 3.9 PORTER'S FIVE FORCES ANALYSIS
  - 3.9.1 THREAT OF NEW ENTRANTS
  - 3.9.2 THREAT OF SUBSTITUTES
  - 3.9.3 BARGAINING POWER OF SUPPLIERS
  - 3.9.4 BARGAINING POWER OF BUYERS
  - 3.9.5 INTENSITY OF COMPETITIVE RIVALRY
- 3.10 IMPACT OF AI/GEN AI ON MACHINE VISION MARKET
  - 3.10.1 INTRODUCTION
  - 3.10.2 IMPACT OF AI/GEN AI ON KEY END-USE INDUSTRIES
    - 3.10.2.1 Electronics & semiconductors
    - 3.10.2.2 Food & beverages
  - 3.10.3 AI USE CASES
  - 3.10.4 FUTURE OF AI/GEN AI IN MACHINE VISION ECOSYSTEM

## **4 COMPETITIVE LANDSCAPE**

- 4.1 INTRODUCTION
- 4.2 KEY PLAYER STRATEGIES/RIGHT TO WIN, JANUARY 2021–MARCH 2025
- 4.3 REVENUE ANALYSIS, 2020–2024
- 4.4 MARKET SHARE ANALYSIS OF TOP FIVE PLAYERS, 2024
- 4.5 PRODUCT COMPARISON
- 4.6 COMPANY VALUATION AND FINANCIAL METRICS
- 4.7 COMPANY EVALUATION MATRIX: KEY PLAYERS, 2024
  - 4.7.1 STARS
  - 4.7.2 EMERGING LEADERS
  - 4.7.3 PERVASIVE PLAYERS
  - 4.7.4 PARTICIPANTS
  - 4.7.5 COMPANY FOOTPRINT: KEY PLAYERS, 2024
    - 4.7.5.1 Company footprint
    - 4.7.5.2 Region footprint
    - 4.7.5.3 System type footprint
    - 4.7.5.4 Component footprint
    - 4.7.5.5 Industry footprint

## 4.8 COMPANY EVALUATION MATRIX: STARTUPS/SMES, 2024

### 4.8.1 PROGRESSIVE COMPANIES

### 4.8.2 RESPONSIVE COMPANIES

### 4.8.3 DYNAMIC COMPANIES

### 4.8.4 STARTING BLOCKS

### 4.8.5 COMPETITIVE BENCHMARKING: STARTUPS/SMES, 2024

#### 4.8.5.1 Detailed list of key startups/SMEs

#### 4.8.5.2 Competitive benchmarking of key startups/SMEs

## 4.9 COMPETITIVE SCENARIO

### 4.9.1 PRODUCT LAUNCHES

### 4.9.2 DEALS

## 5 COMPANY PROFILES

### 5.1 KEY PLAYERS

#### 5.1.1 COGNEX CORPORATION

##### 5.1.1.1 Business overview

##### 5.1.1.2 Products/Solutions/Services offered

##### 5.1.1.3 Recent developments

###### 5.1.1.3.1 Product launches

##### 5.1.1.4 MnM view

###### 5.1.1.4.1 Key strengths

###### 5.1.1.4.2 Strategic choices

###### 5.1.1.4.3 Weaknesses and competitive threats

#### 5.1.2 BASLER AG

##### 5.1.2.1 Business overview

##### 5.1.2.2 Products/Solutions/Services offered

##### 5.1.2.3 Recent developments

###### 5.1.2.3.1 Product launches

###### 5.1.2.3.2 Deals

##### 5.1.2.4 MnM view

###### 5.1.2.4.1 Key strengths

###### 5.1.2.4.2 Strategic choices

###### 5.1.2.4.3 Weaknesses and competitive threats

#### 5.1.3 KEYENCE CORPORATION

##### 5.1.3.1 Business overview

##### 5.1.3.2 Products/Solutions/Services offered

##### 5.1.3.3 Recent developments

###### 5.1.3.3.1 Product launches

- 5.1.3.4 MnM view
  - 5.1.3.4.1 Key strengths
  - 5.1.3.4.2 Strategic choices
  - 5.1.3.4.3 Weaknesses and competitive threats
- 5.1.4 TELEDYNE TECHNOLOGIES INC.
  - 5.1.4.1 Business overview
  - 5.1.4.2 Products/Solutions/Services offered
  - 5.1.4.3 Recent developments
    - 5.1.4.3.1 Product launches
  - 5.1.4.4 MnM view
    - 5.1.4.4.1 Key strengths
    - 5.1.4.4.2 Strategic choices
    - 5.1.4.4.3 Weaknesses and competitive threats
- 5.1.5 OMRON CORPORATION
  - 5.1.5.1 Business overview
  - 5.1.5.2 Products/Solutions/Services offered
  - 5.1.5.3 Recent developments
    - 5.1.5.3.1 Product launches
    - 5.1.5.3.2 Deals
  - 5.1.5.4 MnM view
    - 5.1.5.4.1 Key strengths
    - 5.1.5.4.2 Strategic choices
    - 5.1.5.4.3 Weaknesses and competitive threats
- 5.1.6 TKH
  - 5.1.6.1 Business overview
  - 5.1.6.2 Products/Solutions/Services offered
  - 5.1.6.3 Recent developments
    - 5.1.6.3.1 Product launches
    - 5.1.6.3.2 Deals
  - 5.1.6.4 MnM view
    - 5.1.6.4.1 Key strengths
    - 5.1.6.4.2 Strategic choices
    - 5.1.6.4.3 Weaknesses and competitive threats
- 5.1.7 SICK AG
  - 5.1.7.1 Business overview
  - 5.1.7.2 Products/Solutions/Services offered
  - 5.1.7.3 Recent developments
    - 5.1.7.3.1 Product launches
    - 5.1.7.3.2 Deals

## 5.1.8 SONY GROUP CORPORATION

5.1.8.1 Business overview

5.1.8.2 Products/Solutions/Services offered

5.1.8.3 Recent developments

5.1.8.3.1 Product launches

## 5.1.9 TEXAS INSTRUMENTS INCORPORATED

5.1.9.1 Business overview

5.1.9.2 Products/Solutions/Services offered

5.1.9.3 Recent developments

5.1.9.3.1 Product launches

## 5.1.10 ATLAS COPCO AB

5.1.10.1 Business overview

5.1.10.2 Products/Solutions/Services offered

## 5.1.11 AMETEK.INC.

5.1.11.1 Business overview

5.1.11.2 Products/Solutions/Services offered

## 5.1.12 EMERSON ELECTRIC CO.

5.1.12.1 Business overview

5.1.12.2 Products/Solutions/Services offered

5.1.12.3 Recent developments

5.1.12.3.1 Deals

## 5.1.13 CANON INC.

5.1.13.1 Business overview

5.1.13.2 Products/Solutions/Services offered

## 5.1.14 ZEBRA TECHNOLOGIES CORP.

5.1.14.1 Business overview

5.1.14.2 Products/Solutions/Services offered

5.1.14.3 Recent developments

5.1.14.3.1 Product launches

5.1.14.3.2 Deals

## 5.2 OTHER PLAYERS

### 5.2.1 QUALITAS TECHNOLOGIES

### 5.2.2 BAUMER

### 5.2.3 TORDIVEL AS

### 5.2.4 MVTEC SOFTWARE GMBH

### 5.2.5 JAI A/S

### 5.2.6 INDUSTRIAL VISION SYSTEMS

### 5.2.7 IVISYS

### 5.2.8 USS VISION LLC

5.2.9 OPTOTUNE

5.2.10 IDS IMAGING DEVELOPMENT SYSTEMS GMBH

5.2.11 INTELGIC INC.

## **6 APPENDIX**

### **6.1 RESEARCH METHODOLOGY**

#### **6.1.1 RESEARCH DATA**

6.1.1.1 Secondary and primary Research

6.1.1.2 Secondary data

6.1.1.3 Primary data

#### **6.1.2 RESEARCH ASSUMPTIONS**

#### **6.1.3 RESEARCH LIMITATIONS**

### **6.2 COMPANY EVALUATION MATRIX: METHODOLOGY**

### **6.3 AUTHOR DETAILS**

## List Of Tables

### LIST OF TABLES

TABLE 1 MACHINE VISION MARKET: ROLE OF COMPANIES IN ECOSYSTEM

TABLE 2 LIST OF MAJOR PATENTS, 2021–2024

TABLE 3 LIST OF KEY CONFERENCES AND EVENTS, 2025–2026

TABLE 4 MACHINE VISION MARKET: IMPACT OF PORTER'S FIVE FORCES

TABLE 5 MACHINE VISION MARKET: OVERVIEW OF STRATEGIES ADOPTED BY KEY PLAYERS, JANUARY 2021–MARCH 2025

TABLE 6 MACHINE VISION MARKET: DEGREE OF COMPETITION

TABLE 7 MACHINE VISION MARKET: REGION FOOTPRINT

TABLE 8 MACHINE VISION MARKET: SYSTEM TYPE FOOTPRINT

TABLE 9 MACHINE VISION MARKET: COMPONENT FOOTPRINT

TABLE 10 MACHINE VISION MARKET: INDUSTRY FOOTPRINT

TABLE 11 MACHINE VISION MARKET: DETAILED LIST OF KEY STARTUPS/SMES

TABLE 12 MACHINE VISION MARKET: COMPETITIVE BENCHMARKING OF KEY STARTUPS/SMES

TABLE 13 MACHINE VISION MARKET: PRODUCT LAUNCHES, JANUARY 2021–MARCH 2025

TABLE 14 MACHINE VISION MARKET: DEALS, JANUARY 2021–MARCH 2025

TABLE 15 COGNEX CORPORATION: COMPANY OVERVIEW

TABLE 16 COGNEX CORPORATION: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 17 COGNEX CORPORATION: PRODUCT LAUNCHES

TABLE 18 BASLER AG: COMPANY OVERVIEW

TABLE 19 BASLER AG: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 20 BASLER AG: PRODUCT LAUNCHES

TABLE 21 BASLER AG: DEALS

TABLE 22 KEYENCE CORPORATION: COMPANY OVERVIEW

TABLE 23 KEYENCE CORPORATION: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 24 KEYENCE CORPORATION: PRODUCT LAUNCHES

TABLE 25 TELEDYNE TECHNOLOGIES INC.: COMPANY OVERVIEW

TABLE 26 TELEDYNE TECHNOLOGIES INC.: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 27 TELEDYNE TECHNOLOGIES INC.: PRODUCT LAUNCHES

TABLE 28 OMRON CORPORATION: COMPANY OVERVIEW

TABLE 29 OMRON CORPORATION: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 30 OMRON CORPORATION: PRODUCT LAUNCHES

TABLE 31 OMRON CORPORATION: DEALS

TABLE 32 TKH: COMPANY OVERVIEW

TABLE 33 TKH: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 34 TKH: PRODUCT LAUNCHES

TABLE 35 TKH: DEALS

TABLE 36 SICK AG: COMPANY OVERVIEW

TABLE 37 SICK AG: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 38 SICK AG: PRODUCT LAUNCHES

TABLE 39 SICK AG: DEALS

TABLE 40 SONY GROUP CORPORATION: COMPANY OVERVIEW

TABLE 41 SONY GROUP CORPORATION: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 42 SONY GROUP CORPORATION: PRODUCT LAUNCHES

TABLE 43 TEXAS INSTRUMENTS INCORPORATED: COMPANY OVERVIEW

TABLE 44 TEXAS INSTRUMENTS INCORPORATED: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 45 TEXAS INSTRUMENTS INCORPORATED: PRODUCT LAUNCHES

TABLE 46 ATLAS COPCO AB: COMPANY OVERVIEW

TABLE 47 ATLAS COPCO AB: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 48 AMETEK.INC.: COMPANY OVERVIEW

TABLE 49 AMETEK.INC.: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 50 EMERSON ELECTRIC CO.: COMPANY OVERVIEW

TABLE 51 EMERSON ELECTRIC CO.: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 52 EMERSON ELECTRIC CO.: DEALS

TABLE 53 CANON INC.: COMPANY OVERVIEW

TABLE 54 CANON INC.: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 55 ZEBRA TECHNOLOGIES CORP.: COMPANY OVERVIEW

TABLE 56 ZEBRA TECHNOLOGIES CORP.: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 57 ZEBRA TECHNOLOGIES CORP.: PRODUCT LAUNCHES

TABLE 58 ZEBRA TECHNOLOGIES CORP.: DEALS

TABLE 59 MACHINE VISION MARKET: RESEARCH ASSUMPTIONS

TABLE 60 MACHINE VISION MARKET: RISK ANALYSIS

## List Of Figures

### LIST OF FIGURES

- FIGURE 1 MACHINE VISION MARKET SIZE, 2021–2030
- FIGURE 2 CAMERAS SEGMENT TO ACCOUNT FOR LARGEST SHARE OF MACHINE VISION MARKET FROM 2025 TO 2030
- FIGURE 3 SMART CAMERA-BASED SEGMENT TO LEAD MARKET DURING FORECAST PERIOD
- FIGURE 4 FOOD & BEVERAGES SEGMENT TO ACCOUNT FOR LARGEST MARKET SHARE DURING FORECAST PERIOD
- FIGURE 5 ASIA PACIFIC ACCOUNTED FOR LARGEST SHARE OF MACHINE VISION MARKET IN 2024
- FIGURE 6 DRIVERS, RESTRAINTS, OPPORTUNITIES, AND CHALLENGES
- FIGURE 7 ANNUAL INSTALLATION OF INDUSTRIAL ROBOTICS, 2019–2023
- FIGURE 8 IMPACT ANALYSIS: DRIVERS
- FIGURE 9 IMPACT ANALYSIS: RESTRAINTS
- FIGURE 10 IMPACT ANALYSIS: OPPORTUNITIES
- FIGURE 11 IMPACT ANALYSIS: CHALLENGES
- FIGURE 12 TRENDS/DISRUPTIONS IMPACTING CUSTOMER BUSINESS
- FIGURE 13 MACHINE VISION MARKET: VALUE CHAIN ANALYSIS
- FIGURE 14 MACHINE VISION MARKET: ECOSYSTEM ANALYSIS
- FIGURE 15 PATENTS APPLIED AND GRANTED, 2015–2024
- FIGURE 16 MACHINE VISION MARKET: PORTER'S FIVE FORCES ANALYSIS
- FIGURE 17 AI USE CASES IN MACHINE VISION
- FIGURE 18 MACHINE VISION MARKET: REVENUE ANALYSIS OF FIVE KEY PLAYERS, 2020–2024
- FIGURE 19 MACHINE VISION MARKET SHARE ANALYSIS, 2024
- FIGURE 20 PRODUCT COMPARISON
- FIGURE 21 COMPANY VALUATION
- FIGURE 22 FINANCIAL METRICS (EV/EBITDA)
- FIGURE 23 MACHINE VISION MARKET: COMPANY EVALUATION MATRIX (KEY PLAYERS), 2024
- FIGURE 24 MACHINE VISION MARKET: COMPANY FOOTPRINT
- FIGURE 25 MACHINE VISION MARKET: COMPANY EVALUATION MATRIX (STARTUPS/SMES), 2024
- FIGURE 26 COGNEX CORPORATION: COMPANY SNAPSHOT
- FIGURE 27 BASLER AG: COMPANY SNAPSHOT
- FIGURE 28 KEYENCE CORPORATION: COMPANY SNAPSHOT
- FIGURE 29 TELEDYNE TECHNOLOGIES INC.: COMPANY SNAPSHOT

FIGURE 30 OMRON CORPORATION: COMPANY SNAPSHOT  
FIGURE 31 TKH: COMPANY SNAPSHOT  
FIGURE 32 SICK AG: COMPANY SNAPSHOT  
FIGURE 33 SONY GROUP CORPORATION: COMPANY SNAPSHOT  
FIGURE 34 TEXAS INSTRUMENTS INCORPORATED: COMPANY SNAPSHOT  
FIGURE 35 ATLAS COPCO AB: COMPANY SNAPSHOT  
FIGURE 36 AMETEK.INC.: COMPANY SNAPSHOT  
FIGURE 37 EMERSON ELECTRIC CO.: COMPANY SNAPSHOT  
FIGURE 38 CANON INC.: COMPANY SNAPSHOT  
FIGURE 39 ZEBRA TECHNOLOGIES CORP.: COMPANY SNAPSHOT  
FIGURE 40 MACHINE VISION MARKET: RESEARCH DESIGN

## I would like to order

Product name: Machine Vision - Company Evaluation Report, 2025

Product link: <https://marketpublishers.com/r/M21F0FC83EB0EN.html>

Price: US\$ 2,650.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/M21F0FC83EB0EN.html>