Global and China Machine Vision System Industry Report, 2018-2022

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STUDY GOAL AND OBJECTIVES

This report provides the industry executives with strategically significant competitor information, analysis, insight and projection on the competitive pattern and key companies in the industry, crucial to the development and implementation of effective business, marketing and R&D programs.

REPORT OBJECTIVES

- To establish a comprehensive, factual, annually updated and cost-effective information base on market size, competition patterns, market segments, goals and strategies of the leading players in the market, reviews and forecasts.
- To assist potential market entrants in evaluating prospective acquisition and joint venture candidates.
- To complement the organizations' internal competitor information gathering efforts with strategic analysis, data interpretation and insight.
- To suggest for concerned investors in line with the current development of this industry as well as the development tendency.
- To help company to succeed in a competitive market, and

METHODOLOGY

Both primary and secondary research methodologies were used in preparing this study. Initially, a comprehensive and exhaustive search of the literature on this industry was conducted. These sources included related books and journals, trade literature, marketing literature, other product/promotional literature, annual reports, security analyst reports, and other publications. Subsequently, telephone interviews or email correspondence was conducted with marketing executives etc. Other sources included related magazines, academics, and consulting companies.

INFORMATION SOURCES

The primary information sources include Company Reports, and National Bureau of Statistics of China etc.

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Abstract

A machine vision system replaces human eyes to make judges and measurements, and it falls into the PC type and the embedded type, among which the former is the most widely used.

Under the backdrop of Industry 4.0, the machine vision industry has been growing steadily over the recent years. In 2017, the global market size of machine vision systems approximated USD8.1 billion and showed an average annual growth rate of over 15.0%, of which German market size reported EUR2.71 billion or USD3.1 billion (the average exchange rate of EUR to USD at 1:1.1297 in 2017), sweeping more than one-third of global total and being naturally the biggest machine vision market in the world. It is expected that the global machine vision market will show a growth rate of 5% to 10% between 2018 and 2022.

Chinese machine vision industry started late and has a small market size. In 2017, the Chinese market of machine vision systems was worth RMB3.2 billion (about USD470 million based on the average exchange rate of USD to RMB at 1:6.7547 in 2017), accounting for 5.8% of global total and presenting a year-on-year surge of 23.1%. As estimated, the Chinese market size will keep a growth rate of about 20.0% from 2018 to 2022, largely boosted by the three as follows:

Firstly, the State has issued favorable policies successively for the development of intelligent manufacturing, intelligent robotic vision system, intelligent detection and other sectors. For instance, China released in November 2017 the Action Plan for High-end Intelligent Remanufacturing during 2018-2020 which put it forward that China's intelligent detection technology should be up to the international advanced level in 2020.

Secondly, machine vision system finds more and more application and the demand for it keeps growing. In China, machine vision system is now primarily utilized in such fields as electronic manufacturing, automobile, printing, food and packaging machinery, and in 2017 the demand from those sectors saw 70.0% as a percentage of total demand. Electronic manufacturing is the biggest applied market of machine vision system, and in 2017 it needed machine vision systems which were worth RMB1.5 billion or so, particularly the demand for machine vision system applied to SMT (Surface Mount Technology) and AOI/AXI equipment. What's more, automobile is a key area where machine vision system gets applied, and in 2017 the machine vision systems applied in automobile were worth roughly RMB350 million. Machine vision system is also used in the driver assistance system and self-driving cars. In the wake of advances in artificial intelligence, machine vision gets increasingly used in sweeper robot, service robot and intelligent security and other fields.

Lastly, Production cost is reduced. Machine vision can reduce the pressure from the rising labor cost effectively and it gets used by more and more enterprises to detect, measure and recognize production lines. In a word, machine vision will penetrate more fields.

Thus far, the world's key suppliers of machine vision system consist mainly of Keyence, Omron and Panasonic from Japan, Cognex from the United States, Dalsa from Canada, Daheng New Epoch Technology, Shenzhen JT Automation Equipment, etc. from China. Among them, Japanese and American companies take a lead in the competition. In 2017, Keyence ranked first with a 9.5% market share, while Daheng New Epoch Technology as the largest provider of machine vision systems in China only enjoyed a global market share of 1.4%.

To perfect industrial chain and be more competitive in the promising machine vision market, some players tapped into the machine vision field also by means of acquisitions, for example, Baidu purchased xPerception, a provider of machine vision technologies in April 2017; Google acquired AIMatter, an image processing company in August 2017.

Global and China Machine Vision System Industry Report, 2018-2022 by ResearchInChina highlights the followings:

◆Industrial laser (definition, classification, functions, industrial chain, etc.);

◆Global market of machine vision systems (development environment, market size, patents, competitive landscape, etc.);

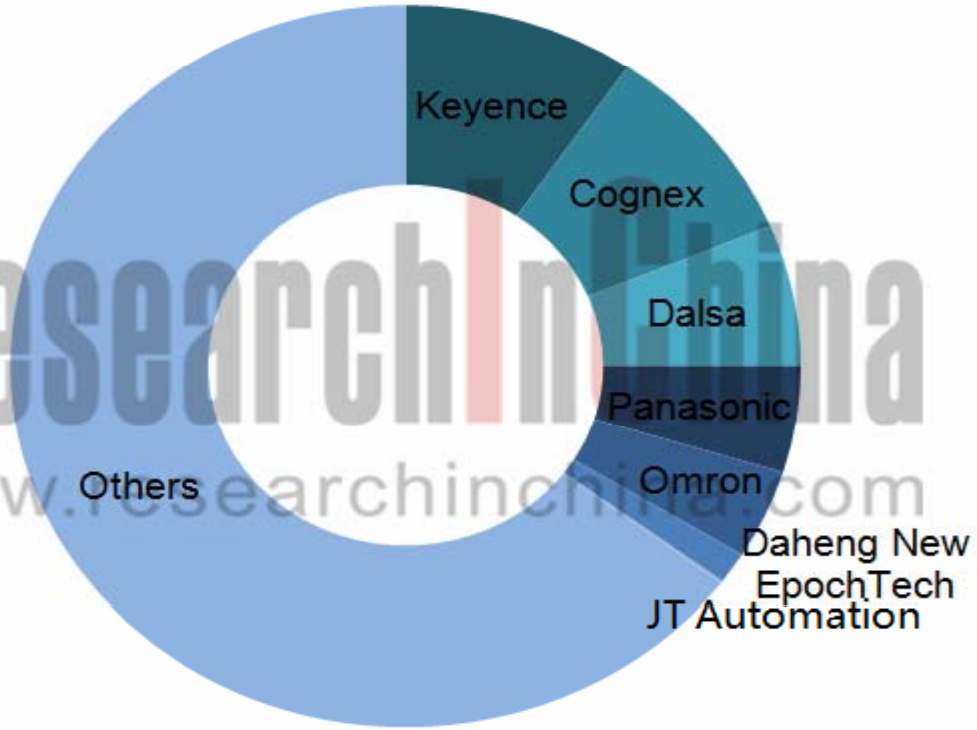
◆Chinese market of machine vision systems (development environment, status quo, patents, market structure, competitive landscape, cost structure, development tendency, etc.);

◆Status quo and market size of machine vision system components (light source, lens, industrial camera, image capture card, image processing software, etc.);

◆Status quo and market size of machine vision systems applied in semiconductor & electronic manufacturing, automobile, pharmaceuticals, food and packaging machinery;

◆9 foreign and 12 Chinese suppliers of machine vision systems and components (operation, machine vision business and so forth).

Competitive Landscape of Global Machine Vision System Market, 2017



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