

## Global and Domestic CAE Market for Machinery: Key Research Findings 2016

### ◆ Research Outline

Yano Research Institute has conducted a study on the global and domestic CAE market with the following conditions:

1. Research period: From January to May, 2016
2. Research target: CAE vendors
3. Research methodologies: Face-to-face interviews with expert researchers, surveys via telephone/email

#### What is CAE?

CAE (Computer Aided Engineering) in this research indicates a computer system that enables intelligent and efficient use of the computing technologies in the process of product designing and developing. There are CAE for machinery, 1DCAE, the model-based development tool, and other CAE that support numerical calculation, and etc.

The CAE market for machinery in this research targets CAE for machinery that helps to analyze structure, thermal fluid, resin molding, and casting, the market size of which is calculated based on the sales of the businesses.

### ◆ Key Findings

#### ■ Global CAE Market for Machinery in 2015 Rose by 6.9% from Previous Year to Attain US\$ 3,134 Million

The global market of CAE for machinery in 2015 rose by 6.9% from the previous year to attain US\$3,134 million based on the sales of the businesses. The global economic deceleration is likely to depress capital investment at the manufacturing industry, which may slow down the growth rate of the CAE market. Nevertheless, the global market of CAE for machinery is projected to continue the stable growth from the mid-term perspective, attaining US\$4,655 million by 2020.

#### ■ Domestic CAE Market for Machinery in 2015 Grew by 4.7% from Previous Year to Achieve 67.2 Billion Yen

The domestic market of CAE for machinery in 2015 grew by 4.7% from the previous year to achieve 67.232 billion yen. Despite some uncertainties in the Japanese economy, there is profound expectation toward CAE to make development process more efficient, such as to shorten development period. Therefore, the domestic CAE market for machinery is likely to continue the steady growth, achieving 91.8 billion yen by 2020.

#### ■ A Sign of a Change in CAE Market, with 1DCAE and Other New Support Tools in Demand

The mainstream of the traditional CAE market has been those CAE for machinery that calculate strength of structure (structure analysis), resistance in fluid (thermal fluid analysis), and etc. On the other hand, model-based development methods have begun being used at the development processes, such as in designing automobiles. This tendency may drive more needs for new supporting tools including 1DCAE. For the future, alignment of 1DCAE and CAE for machinery is expected to be the major topic in the market.

◆ **Report format:**

Published report: “CAE Market 2016”

Issued on: May 31, 2016

Language: Japanese

Format: 289 pages in A4 format

Price: 200,000 yen (The consumption tax shall additionally be charged for the sales in Japan.)

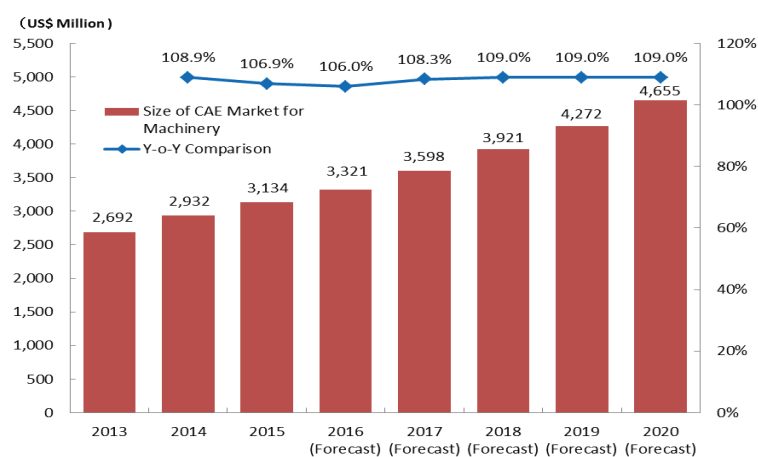
**Contacts:** Public Relations

**Yano Research Institute Ltd. (URL: <http://www.yanoresearch.com>)**

Phone: +81-3-5371-6912

E-mail: [press@yano.co.jp](mailto:press@yano.co.jp)

■ **Figure 1: Transition and Forecast of Global Size of CAE Market for Machinery**

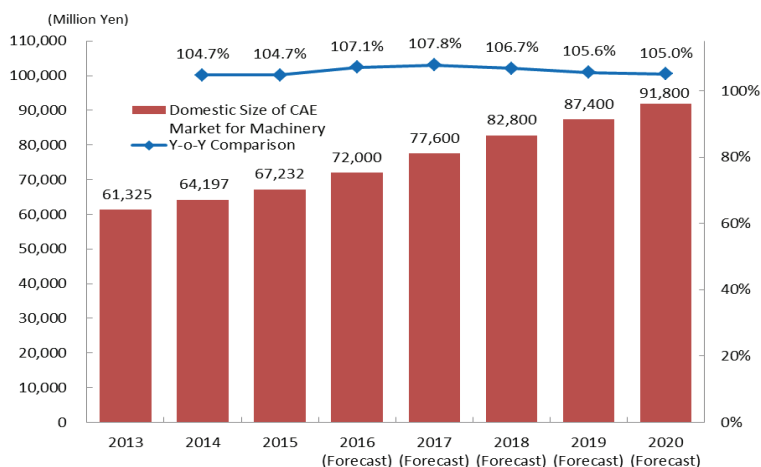


Calculation by Yano Research Institute

Notes:

1. The market size is based on the sales of the businesses.
2. The figures in 2016 and beyond are forecast.

■ **Figure 2: Transition and Forecast of Domestic Size of CAE Market for Machinery**



Calculation by Yano Research Institute

Notes:

3. The market size is based on the sales of the businesses.
4. The figures in 2016 and beyond are forecast.
5. The domestic CAE market for machinery is included in the global CAE market for machinery.