

Powered Exoskeleton Market in Japan: Key Research Findings 2017

◆ Research Outline

Yano Research Institute has conducted a study on the domestic powered exoskeleton market with the following conditions:

1. Research period: From August to November, 2017
2. Research target: Domestic powered exoskeleton manufacturers, distributors, related organizations, and etc.
3. Research methodologies: Face-to-face interviews by the expert researchers, surveys via telephone/email, and literature research

<What is the Powered Exoskeleton Market?>

Powered exoskeletons (a.k.a. PAS, power assist suits) in this research indicate wearable mobile machines or suits that assist the wearers in some ways (i.e., walking assistance, workload lightening and etc.) by wearing them, regardless of whether or not they have power sources for such functions. There are three categories in powered exoskeletons: Walking assistance type which aims to assist walking; Workload lightening type which aims to reduce physical burden in some heavy labor; and some other types that do not fall into either of them.

◆ Key Findings

■ Powered Exoskeleton Market Size in FY2016 Grew to 2,676 Million Yen, 146.2% on Y-o-Y Basis

With regard to both walking assistance and workload lightening types of exoskeletons, there have been a series of new market entry by enterprises and of new products released. These factors, together with the influence of subsidies from MHLW for workload lightening types, the shipment of powered exoskeletons has expanded in FY2016. The domestic powered exoskeleton market in FY2016, based on the shipment value at manufacturers, has grown to 2,676 million yen, 146.2% of the size of the previous fiscal year.

■ With True Value of Powered Exoskeletons Being Needed to be Demonstrated in Practical Use, Fiercer Competition within Market Likely to Occur

Regardless of whether or not powered exoskeletons have power sources in assisting the actions of humans, the number of products has gradually increased as the structure and functions of such products diversified. In such a situation, powered exoskeletons have begun being needed to show their true value of whether they conform to the objectives and workloads of user needs, and whether they satisfy what the users expect. Against this backdrop, fiercer competition is likely to start in the powered exoskeleton market.

■ Powered Exoskeleton Market Size Projected to Achieve 4,050 Million Yen by FY2020

The powered exoskeleton market is sure to be on the rise until FY2020, but the market is not likely to be fully in demand yet. Rather, it is considered to be positioned in the time period

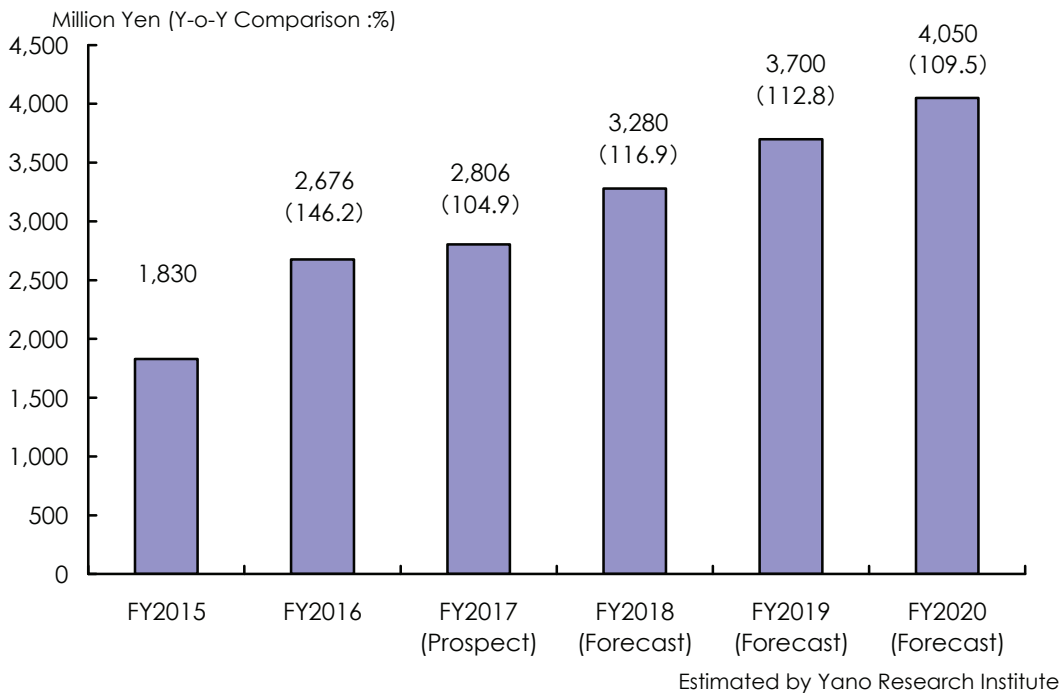
of product evaluation, i.e., the period of putting the products to the test. In the course of such processes, there may be some cases where large number of products to be introduced. Consequently, the powered exoskeleton market, based on the shipment value at manufacturers, is estimated to attain 4,050 million yen by FY2020.

◆ **Report Format**

Published report: “Powered Exoskeleton Market 2017”
 Issued on: November 29, 2017
 Language: Japanese
 Format: 128 pages in A4 format
 Price: 150,000 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

■ **Figure 1: Transition and Forecast of Powered Exoskeleton Market Size**



Notes:

1. The market size is based on the shipment value at manufacturers.
2. Powered exoskeletons (a.k.a. PAS, power assist suits) in this research indicate wearable mobile machines or suits that assist the wearers in some ways (i.e., walking assistance, workload lightening and etc.) by wearing them, regardless of whether or not they have power sources for such functions. The products include ATOUN, Muscle Suit, ACSIVE, ARM-1D (assist suit), and HAL®.