

International Statistics on Vacuum Technology
JVIA (Japan Vacuum Industry Association)
AVEM International (Association of Vacuum Equipment Manufacturers International)
EVTA (European Vacuum Technology Association)
in co-operation with
SEMI (Semiconductor Equipment and Materials International)

International Statistics on Vacuum Technology
Rules and Procedures

February 17th 2020

1. Participating Associations

1.1 Regional Associations

JVIA Japan Vacuum Industry Association

AVEM International Association of Vacuum Equipment Manufacturers International

EVTA European Vacuum Technology Association

1.2 Cooperating Associations

SEMI Semiconductor Equipment Manufacturers International

1.3 Working Group

The “Working Group” shall be responsible for these rules and procedures. The Working Group shall consist of up to four representatives from AVEM, JVIA and EVTA, plus their secretaries.

2. Goal:

It is the common goal of the participating vacuum industry associations and their members to gather global statistics on vacuum component sales (by product for each geographic region and market segment) on a regular and frequent basis using a standardized global format.

International Statistics on Vacuum Technology

JVIA (Japan Vacuum Industry Association)

AVEM International (Association of Vacuum Equipment Manufacturers International)

EVTA (European Vacuum Technology Association)

in co-operation with

SEMI (Semiconductor Equipment and Materials International)

3. Procedures

3.1 Survey Interval

The product and geographic data for the global vacuum statistics shall be collected on a quarterly basis starting with the First Quarter of 2002. Data on market segments in Condensed Report format shall be collected on a quarterly basis starting with data for calendar year 2005.

3.2 Breakdown by Region

Data for Europe, Japan, North America, Greater China (defined as PRC and Taiwan), Korea and Rest of the World shall be reported. Data for Europe shall include sales to the United Kingdom, Ireland, and continental Europe including the following countries bordering Europe to the east – Russia, Ukraine, and the following countries bordering Europe to the southeast – Turkey, Cyprus, and Israel. Data for North America shall include sales to all countries on the American continent north of the Panama Canal.

3.3 Breakdown by Product Groups

Data shall be collected and reported quarterly by geographic region for products listed in the attached Nomenclature. [Note that the initial effort covers vacuum components only and excludes vacuum systems and tools.] The Nomenclature shall be subject to change annually by mutual agreement of the Working Group. Every attempt shall be made to limit changes so as not to degrade the value of the statistics. The scope of the statistics may be extended to include additional vacuum-related products by mutual agreement of the Working Group. No changes to the Nomenclature shall be made during a calendar year.

3.4 Breakdown by Market Segments

Market segments are defined per the attached Market Segmentation. Market segment data shall be collected and reported quarterly, starting with data for calendar year 2005, on a worldwide basis, for “Condensed Report” product categories. (See Section 3.6.6 for a definition of Condensed Report categories.)

3.5 Reporting Procedure

3.5.1 Unless the participating company “Headquarters” decides otherwise, all data for all applicable regions shall be submitted by the company “Headquarters” to the Regional Association that is responsible for the region in which the company’s “Headquarters” is located. The company headquarter shall be a member of the respective association for the region the company headquarter is located.

3.5.2 Each Regional Association shall be responsible for selecting a regional party, hereafter called a “Regional Notary”, assuring a high level of security and a high degree of confidentiality regarding company-specific data that it receives as input for

International Statistics on Vacuum Technology

JVIA (Japan Vacuum Industry Association)

AVEM International (Association of Vacuum Equipment Manufacturers International)

EVTA (European Vacuum Technology Association)

in co-operation with

SEMI (Semiconductor Equipment and Materials International)

the International Statistics. Under no circumstances shall any member company representative or any secretary of any Regional Association ever have access to the data from an individual company.

- 3.5.3 With the reporting year 2020 ISVT introduces a web-based reporting system. This reporting system (VISTA) replaces the Microsoft Excel-based reporting of the participating companies after 18 years. The products, markets and regions for what to report will remain the same.

Why is the survey to be conducted using a web-based reporting system?

- The web-based reporting system will make data collection more secure, and it is no longer necessary to send Excel files back and forth.
- Automatic data consolidation on the server
- Faster data availability for companies
- More cost-efficient, as the use of a CPA is no longer necessary (except of for the costs incurred by an external auditor)
- Reduced administrative workload for the participating associations, since data input and output is done automatically by applying the Majority Market Share Rule per section 4.4 and the Inference Rules per section 4.5
- other users within the participating companies may get online access (access levels to be defined) to the results

- 3.5.4 The reporting should be realized browser based.

- 3.5.5 Users are to log in via an app or by navigating to a specific website. The person responsible within the participating company (company admin) is to log in by entering the email address and a customized password. In the “Security levels” section, it is defined which other users within a company can access the reporting system and which permissions they have. For each participating company, the association should maintain the “Company admin” account. Company viewers can be created in the system by the respective associations on request of the company admin.

- 3.5.6 In the input mask, only those region categories (products) for which the company has provided figures are enabled for editing (as per reference file). During the initial setup, which is done once a year, the company can define the categories for which it wishes to provide figures.

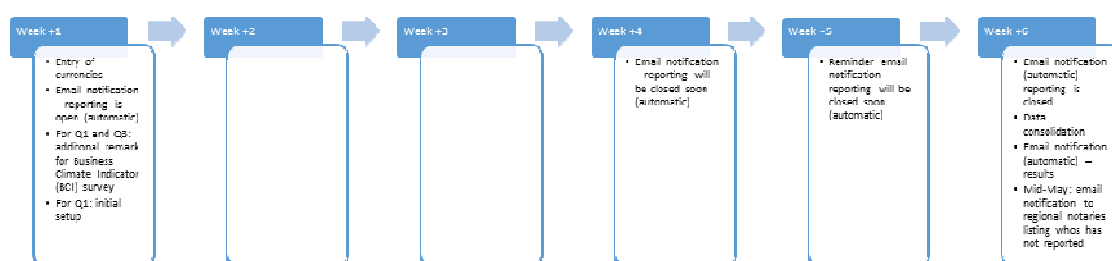
- 3.5.7 The participating companies enter their data themselves. But since some participating member companies don't want to complete their reporting forms themselves, but handed over this service to their associations, this option must also be available in the web-based reporting system. This makes it necessary to adapt permissions for these associations accordingly.

International Statistics on Vacuum Technology

JVIA (Japan Vacuum Industry Association)
 AVEM International (Association of Vacuum Equipment Manufacturers International)
 EVTA (European Vacuum Technology Association)
 in co-operation with
 SEMI (Semiconductor Equipment and Materials International)

3.5.8 Twice a year, a survey is conducted on the business climate in the ISVT markets and regions.

3.5.9 The figure illustrates the processes happening after the end of each quarter:



3.6 Distribution

3.6.1 **Confidentiality:** The results of the survey are for internal use of the participating companies only. Any publication of data to non-participating companies and other industry associations must be authorised by the Working Group.

3.6.2 The final aggregate report generated by the web-based reporting system shall include all non-company specific data, i.e. for all products, all geographic regions, and all market segments, if applicable. The Regional Association secretaries shall review the aggregate report to check that the data corresponds with logical expectations. Questions from Participating Companies regarding data in a particular category should be addressed to the Regional Association secretary. If the Regional Association secretaries are not able to address the concern, they may consult with Working Group member(s) who report in that category and thus would also normally see the data for that particular product category. After the Regional Association secretaries have reviewed the report, the web-based reporting system shall notify the participating companies in accordance with 3.6.3. The web-based reporting system shall also generate a subset of aggregate data to the Cooperating Association(s). This subset shall consist of a) the Condensed Report (see section 3.6.6), and b) relevant market segmentation data when available.

3.6.3 The web-based reporting system shall disclose sections of the overall report directly and exclusively to the participating companies. Each company shall receive data on such product categories for which they have reported and the Condensed Report (see section 3.6.6.) No company shall receive product-specific data for categories in which they do not report, except to the summary of revenues for every product category (region "World")

International Statistics on Vacuum Technology

JVIA (Japan Vacuum Industry Association)

AVEM International (Association of Vacuum Equipment Manufacturers International)

EVTA (European Vacuum Technology Association)

in co-operation with

SEMI (Semiconductor Equipment and Materials International)

-
- 3.6.4 If a company does not meet the requirements of participation (e.g. only data for one region are submitted although considerable sales to other regions are made), only consolidated data for the local region, for the relevant product categories and for the Condensed Report) shall be disclosed to the company. Other participating Regional Associations shall not provide final reports back to companies affiliated with those companies that do not meet the requirements of participation.
- 3.6.5 Regional Associations with members who report statistics for vacuum-related products not included in the Nomenclature may provide these members with the Summary Report on vacuum components for the region in which the association is located. (See Section 3.6.7 for a definition of the Summary Report.) For example, AVEM gathers statistics on vacuum systems/tools, not currently included in the International Statistics program. AVEM may distribute to these vacuum systems/tool manufacturers the Summary Report for North America only.
- 3.6.6 The Condensed Report shall be made available to all participating members, subject to the condition noted in 3.6.4. The Condensed Report shall consist of subtotals for:
- I. Rough Vacuum Pumps
 - II. Medium Vacuum Pumps
 - III. High vacuum pumps
 - IV. Vacuum Instrumentation
 - V. Vacuum Hardware
 - VI. Total Vacuum Component Market
- 3.6.7 The Summary Report shall be made available as described in Section 3.6.5. The Summary Report shall consist of subtotals for:
- I. Vacuum Pumps
 - II. Vacuum Instrumentation
 - III. Vacuum Hardware
 - IV. Total Vacuum Component Market

4. Other Rules and Explanations

4.1 Data Specifics

- 4.1.1 Data shall be reported for sales (shipments).
- 4.1.2 All data shall be reported to the web-based reporting system in US Dollars, British Pound, Yen, Swiss Franks, Yuan Renminbi, or Euro at agreed exchange rates. Each Regional Association may set rules on the reporting currency that it will accept. However, all data shall be reported back to participants in US Dollars only.

International Statistics on Vacuum Technology

JVIA (Japan Vacuum Industry Association)

AVEM International (Association of Vacuum Equipment Manufacturers International)

EVTA (European Vacuum Technology Association)

in co-operation with

SEMI (Semiconductor Equipment and Materials International)

-
- 4.1.3 The geographic data shall be based on the location of the third-party customer (i.e. non-affiliate) of the reporting Company. Similarly, the market segmentation data shall be based on the primary business of the third-party customer, not on his customers. (Example 1: Company A, based in Japan, sells a product to an affiliate in the U.S. who sells that product to a non-affiliated company based in South America. This is a “Rest of World” shipment because the first non-affiliated company is outside North America, Europe, and Japan. Example 2: Company B, based in Japan, sells a product to a distributor based in the U.S. This is a U.S. shipment. The market segment should reflect the primary market of the distributor. Example 3: Company C sells a product to an OEM who manufactures instrumentation to be sold to semiconductor market. The proper market segment for the sale to the OEM is “Instrumentation Manufacturers.”)
- 4.1.4 If a company does not make a product, the company must leave the category blank. If a company manufactures a product, but has no sales in a particular quarter for that product category, then zero (0) should be entered.
- 4.2 **Participating Companies**
- 4.2.1 All manufacturers of **Vacuum Pumps, Vacuum Hardware and Vacuum Instrumentation** are invited to participate in the survey. Each Regional Association may determine the conditions for membership in its association.
- 4.2.2 Vacuum Companies headquartered in countries outside Europe, USA and Japan are encouraged to participate in the ISVT statistics programme. To participate companies will need to submit data on their worldwide vacuum business via one of the 3 constituent regional associations forming the ISVT working group, namely EVTA, JVIA and AVEM. Companies may either (i) join one of the regional associations via a local subsidiary company in Europe, Japan or America, or (ii) the headquarters company may join one of the regional associations as an associate member,
- 4.2.3 If a vacuum association exists in a particular country and declares its participation in ISVT, this association will regulate the participation in the ISVT statistic programme of its members on its own initiative. The association contributes to the annual costs of maintaining and adapting the web-based reporting system.
- 4.2.4 A newcompany may only participate in the survey if it participates in the First Quarter reporting process of a calendar year.
- 4.2.5 Each Regional Association shall develop and consistently apply its own averaging rules regarding data entry if a participating company fails to submit data in a given quarter. In any case, an estimate is to be entered into the regional submission to the webbased reporting system. A company that fails to submit data shall not receive any

International Statistics on Vacuum Technology

JVIA (Japan Vacuum Industry Association)

AVEM International (Association of Vacuum Equipment Manufacturers International)

EVTA (European Vacuum Technology Association)

in co-operation with

SEMI (Semiconductor Equipment and Materials International)

reports for periods in which it does not participate.

4.3 Elimination of Double-Counting

Sales should be reported only for finished products either 1) sold under the manufacturers own name or 2) sold to and private-labelled by a company which is not a participant in the International Statistics. The following examples are provided in order to assist in eliminating double counting.

- a) If Company A manufactures a valve without flanges for Company B, and Company B puts flanges on it and sells it as a private-labelled product, then only Company B should report. NOTE: The valve is not a **finished product** without the flanges. This example assumes that both Company A and B are participating in the International Statistics.
- b) If Company A sells a flange to Company B to place on a feedthrough, then Company A should report the sale of the flange, and Company B should report the sale of the finished feedthrough. This example assumes that both Company A and B are participants in the International Statistics.
- c) If Company A sells a product to Company B which private labels it as a finished product for sale **and** if both companies are participants in the International Statistics, only company (B) should report. Company A should not report the sale of this product at all. (Note: If Company (B) is not participating, Company (A) should report. A reference list of reporting companies shall be made available through each Regional Association).

4.4 Majority Market Share Rule

If one company represents more than 75 % of the sales of that product category into that region, the sales of this product category (for all regions) shall not be reported*. Rather, the webbased reporting system shall indicate "CNR" (cannot report) and shall include the sales of this product in the category "Non-reported Categories".

4.5 Inference Rules

If there are fewer than three legally independent companies reporting in a specific data entry position (i.e. a specific product in a specific geographic region) the sales of this product category (for all regions) shall not be reported.

If any cell can be calculated by subtraction then neither that cell nor the total may not be reported.

International Statistics on Vacuum Technology

JVIA (Japan Vacuum Industry Association)

AVEM International (Association of Vacuum Equipment Manufacturers International)

EVTA (European Vacuum Technology Association)

in co-operation with

SEMI (Semiconductor Equipment and Materials International)

In both these instances, the webbased reporting system shall indicate “CNR” (cannot report) and shall include the sales of this product in the category “Non-reported Categories”.

4.6 External Auditor

At the request of one of the parties involved, the data should be checked by an external and independent auditor. The costs for this are shared among the associations involved.

5. Cooperation with other Industry Associations and Non-participating Companies

The participating Regional Associations are willing to share information with other industry associations if it is in the mutual interest of all parties.

JVIA, AVEM, EVTA
February 17th 2020
Frankfurt, Germany