



### OVERVIEW OF MACHINERY AND ELECTRICAL MACHINERY EXPORTS

Machinery and electrical machinery consistently rank as the United States' number one and two exports, respectively. While many Americans are discouraged by the U.S. losing global share of production in textiles and furniture, U.S. exports of the equipment used in those industries continue to expand. The sophistication and human capital required to design and manufacture complex production machinery is a comparative advantage enjoyed by the U.S., and the jobs related to this industry are higher paying than lower-tech, retail merchandise production. Analyzing the range and volume of machinery exported from the United States is complex, much like the equipment itself. This VEDP Fast Fact, therefore, aims to clarify the vast array of machinery exported by the United States, the volumes exported, and the foreign destinations.

<b>MACHINERY &amp; ELECTRICAL MACHINERY EXPORTS</b> Total U.S. exports and U.S. exports via Virginia (Billions of Dollars)				
	2006	2007	2008	% Change 2007-08
<b>U.S. Exports—Machinery</b>	\$182.0	\$198.9	\$212.4	6.76%
<b>Virginia Exports—Machinery</b>	\$2.05	\$2.50	\$2.73	9.37%
<b>U.S. Exports—Electrical Machinery</b>	\$145.8	\$148.6	\$152.9	2.96%
<b>Virginia Exports—Electrical Machinery</b>	\$2.46	\$3.41	\$3.26	- 4.41%

(Source: World Trade Atlas)

The table above demonstrates growth in machinery exports over the last few years, but the broader growth trend encompasses a much more extensive timeline. The decline in Virginia's 2008 exports of electrical machinery is due largely to the substantial gain in 2007 in exports of integrated circuits, which declined significantly in 2008. Otherwise, exports of all types of machinery for nearly all industries are experiencing strong growth. If you know your HS product code (Schedule B), you can determine the countries that are buying your types of machines and the annual dollar amounts of those purchases. If you are new to exports, the table on page 2 gives an idea of the type of machinery shipped, and will help familiarize you with the products classified in the Schedule B code for machinery (Chapter 84) versus electrical machinery (Chapter 85). The table shows the variety of products in these two chapters- from air conditioners, to integrated circuits, to vehicle transmissions. If you are thinking, *"our product is a highly specialized and unique product"*, remember, a niche market expanded worldwide could significantly multiply your sales.

If you would like to know which countries are importing your machinery and the volumes, contact your local VEDP International Trade Manager for a trade pattern analysis.



## MACHINERY

### 2008—TOP 20 EXPORTS VIA VIRGINIA MACHINERY & ELECTRICAL MACHINERY

HTS#	Machinery Products	Value \$US	HS code	Electrical Machinery Products	Value \$US
84	<b>Total Machinery</b>	\$2,734,947,258	85	<b>Total Electrical Machinery</b>	\$3,258,019,135
8411	<b>Gas Turbines</b>	\$ 785,513,672	8542	<b>Integrated Circuits</b>	\$2,125,815,832
8467	<b>Hand Tool/ Pneum, Etc</b>	\$ 349,709,956	8517	<b>Line Telephone, Etc EI App</b>	\$178,669,518
8443	<b>Other Printing Machinery</b>	\$ 251,783,767	8525	<b>Trns Ap F R-Tel;Tv Cm</b>	\$ 91,985,769
8414	<b>Air Rel Pumps/Comp</b>	\$ 121,153,481	8504	<b>Adp Power Supplies;Pt</b>	\$ 91,963,789
8471	<b>Computers + Components</b>	\$ 113,460,061	8544	<b>Insulated Cable/Wire/Etc</b>	\$ 88,932,000
8431	<b>Parts 8425 To 8430</b>	\$ 83,814,282	8501	<b>Elec Motor+ Generators</b>	\$ 88,591,396
8481	<b>Pipe Taps/Cock/Valve</b>	\$ 72,172,382	8529	<b>TV/Radio/Radar App Pts</b>	\$ 83,640,294
8419	<b>Temp Changing</b>	\$ 61,228,576	8537	<b>Brd/Pn W Elec Sw+ N/C Ap</b>	\$ 74,367,149
8418	<b>Other Compressors/Etc</b>	\$ 61,015,869	8538	<b>Elec App Parts (8535-7)</b>	\$ 64,650,093
8421	<b>Centrifuge; Filters</b>	\$ 52,018,004	8536	<b>Elec App F Swch=&lt;1000V</b>	\$ 61,412,972
8440	<b>Bookbinding Machinery</b>	\$ 51,679,650	8519	<b>Turntable/Rec+ Cass Play</b>	\$ 25,931,664
8413	<b>Liquid Pumps/Elev</b>	\$ 49,606,174	8511	<b>Igni/Etc Eq; Generator</b>	\$ 25,655,834
8473	<b>Office Machine Parts</b>	\$ 41,464,440	8546	<b>Elec Insulator All Material</b>	\$ 25,239,141
8409	<b>Parts Engines 8407/8408</b>	\$ 40,569,187	8523	<b>Unrecorded Media/N Film</b>	\$ 24,342,313
8477	<b>O Work Rubber+ Plast Etc</b>	\$ 32,873,170	8534	<b>Printed Circuits</b>	\$ 24,039,653
8483	<b>Transmission Product</b>	\$ 32,548,732	8540	<b>Therm/Cld/Ph Cat Tub</b>	\$ 22,610,660
8422	<b>Cleaning Machines</b>	\$ 32,171,969	8526	<b>Radar/Rad Nav Aid Ap</b>	\$ 19,095,201
8462	<b>Forging/Bending/Stamping</b>	\$ 31,136,191	8543	<b>Other Elec Mach/Etc;Pts</b>	\$ 17,925,813
8484	<b>Gasket/Similar Joints</b>	\$ 29,546,945	8541	<b>Semicond Dev;L-Emt Diod</b>	\$ 15,806,340
8479	<b>O W Indiv Functions</b>	\$ 28,356,308	8539	<b>Elec Fila/Discharge Lamp</b>	\$ 12,534,381

(Source: World Trade Atlas)



## MACHINERY

### 2008—TOP 20 EXPORT DESTINATIONS VIA VIRGINIA MACHINERY & ELECTRICAL MACHINERY

Rank	Country	Value \$US	Rank	Country	Value \$US
	<b>Total Machinery</b>	\$ 2,734,947,258		<b>Total Electrical Machinery</b>	\$ 3,258,019,135
1	<b>United Kingdom</b>	\$ 644,521,543	1	<b>Portugal</b>	\$ 760,340,637
2	<b>Canada</b>	\$ 361,192,150	2	<b>Taiwan</b>	\$ 595,945,461
3	<b>Germany</b>	\$ 263,673,730	3	<b>Singapore</b>	\$ 535,742,421
4	<b>Mexico</b>	\$ 161,975,164	4	<b>China</b>	\$ 250,112,286
5	<b>Brazil</b>	\$ 114,437,146	5	<b>Canada</b>	\$ 218,763,885
6	<b>France</b>	\$ 91,003,111	6	<b>Germany</b>	\$ 104,999,825
7	<b>Belgium</b>	\$ 79,314,710	7	<b>United Kingdom</b>	\$ 79,995,949
8	<b>China</b>	\$ 73,679,135	8	<b>Mexico</b>	\$ 67,055,538
9	<b>Russia</b>	\$ 71,461,210	9	<b>Japan</b>	\$ 59,157,122
10	<b>Saudi Arabia</b>	\$ 70,372,039	10	<b>South Korea</b>	\$ 58,838,580
11	<b>Italy</b>	\$ 60,995,028	11	<b>Luxembourg</b>	\$ 44,996,929
12	<b>Netherlands</b>	\$ 44,590,229	12	<b>Italy</b>	\$ 31,213,709
13	<b>Japan</b>	\$ 41,725,752	13	<b>Israel</b>	\$ 26,310,004
14	<b>Australia</b>	\$ 41,411,117	14	<b>United Arab Emirates</b>	\$ 26,003,098
15	<b>Switzerland</b>	\$ 40,446,389	15	<b>Saudi Arabia</b>	\$ 25,453,052
16	<b>Spain</b>	\$ 40,064,188	16	<b>Hong Kong</b>	\$ 25,243,967
17	<b>Sweden</b>	\$ 36,623,913	17	<b>Australia</b>	\$ 22,131,739
18	<b>Poland</b>	\$ 30,988,247	18	<b>Libya</b>	\$ 21,581,876
19	<b>Singapore</b>	\$ 29,872,043	19	<b>Egypt</b>	\$ 20,461,134
20	<b>United Arab Emirates</b>	\$ 23,180,163	20	<b>Netherlands</b>	\$ 18,098,259

(Source: World Trade Atlas)

Machinery & electrical machinery are by far the top two exports from the U.S. and Virginia, but it is important to remember that these machines consist of inputs (parts) from around the world. In other words, machines are made up of smaller machines. In 2006, certain countries benefited from very strong machinery export growth, including China (27.4%), Russia (20%), and Brazil (12.4%). Much of these exports were imported into the United States and used as inputs to machines that were manufactured here and then exported around the world.

# FAST FACTS

## MACHINERY



### Key Export Considerations

Selling machinery internationally requires consideration of four main issues:

- 1) U.S. licensing for possible dual-use items, and due diligence on foreign buyers;
- 2) Meeting foreign standards/regulations, i.e., CE mark, WEEE Directive, etc.;
- 3) The cost and difficulty of shipping equipment that is potentially heavy, oversized, and often very expensive;
- 4) Financing arrangements for your buyers, i.e., letter of credit, payment terms, and export insurance.

Many Virginia companies have benefited from traveling to overseas tradeshows and just “walking the floor” to meet potential partners, i.e., suppliers, dealers, customers, and also to get a feel for the international market. Industry associations often list or sponsor major tradeshows, which also have technical or networking conferences that are invaluable for learning about the market. The table below lists upcoming tradeshows by industry and their website link.

<b>WORLDWIDE MACHINERY TRADESHOWS BY INDUSTRY 2009-10</b>				
<b>Tradeshow Name</b>	<b>Industry</b>	<b>Location</b>	<b>When</b>	<b>Website</b>
<b>Manufacturing Technology World 2009</b> <b>Intermachinery India 2010</b>	All Inclusive	Philippines India	Oct 2009 May 2010	<a href="http://www.globallinkph.com/event_2009_mfgTechWorld.htm">www.globallinkph.com/ event_2009_mfgTechWorld.htm</a> <a href="http://www.intermachineryindia.com/">www.intermachineryindia.co m/</a>
<b>InterFood 2009 and 2010</b> <b>Food Tech 2010</b>	Food Processing	Indonesia Brazil	Aug 2009 Sep 2010	<a href="http://www.allpack-indonesia.com">www.allpack-indonesia.com</a> <a href="http://www.foodtech.com.br">www.foodtech.com.br</a>
<b>Wood Tech 2009 and 2010</b> <b>WMF Beijing 2010</b>	Furniture & Woodworking	Estonia China	Nov 2009 Mar 2010	<a href="http://www.fair.ee/">http://www.fair.ee/</a> <a href="http://www.WoodWorkFair.com">www.WoodWorkFair.com</a>
<b>Korea Metal Week 2009</b> <b>Intertool Austria 2010</b>	Tools / Dies / Metal	Korea Austria	Oct 2009 Oct 2010	<a href="http://www.korea-metal.com">http://www.korea-metal.com</a> <a href="http://www.intertool.at/">http://www.intertool.at/</a>
<b>Motek Germany 2009 Italy &amp; France 2010</b> <b>National Manufacturing Week 2010</b>	Assembly / Handling	Europe Australia	2009-10 May 2010	<a href="http://www.motek-messe.com">www.motek-messe.com</a> <a href="http://www.nationalmanufacturingweek.com.au">www.nationalmanufacturi ngweek.com.au</a>
<b>Plastimagen 2010</b> <b>Plastex 2010</b>	Plastics / Rubber	Mexico Egypt	Mar 2010 Oct 2010	<a href="http://www.plastimagen.com.mx">www.plastimagen.com.m x</a> <a href="http://www.plastex-online.com">www.plastex-online.com</a>
<b>Print Expo 2009</b> <b>Pack Tech 2010</b>	Printing/ Packaging	So. Africa India	Oct 2009 Nov 2010	<a href="http://www.printexpo.co.za">www.printexpo.co.za</a> <a href="http://www.packtech-india.com">www.packtech-india.com</a>
<b>Unijatex 2009 and 2010</b> <b>India ITME 2012</b>	Textiles	Serbia India	Oct 2009 Nov 2012	<a href="http://www.sajam.co.rs">www.sajam.co.rs</a> <a href="http://www.india-itme.com">www.india-itme.com</a>

(Source: Events Eye Tradeshow Directory)



### **VEDP TRADE EVENTS**

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The VEDP participates in many international trade events and hosts a number of market visits. All Virginia companies are welcome to attend.

For a complete listing of the VEDP's international trade events, please visit the "Events" tab on our website: [www.ExportVirginia.org](http://www.ExportVirginia.org)

### **VEDP CONTACT INFORMATION**

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#### **Virginia Economic Development Partnership**

#### **Division of International Trade**

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### **ADDITIONAL RESOURCES**

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- U.S. Department of Commerce: <http://www.commerce.gov>, <http://www.export.gov>  
Bureau of Industry and Security (BIS): <http://www.BIS.doc.gov/>
- American Association of Equipment Manufacturers: <http://www.aem.org>
- Machinery.net manufacturing news website: <http://www.manufacturing.net/>

### **WORKS CITED**

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Events Eye Online Tradeshow Directory. <<http://www.eventseye.com>>

Global Trade Information Services. World Trade Atlas. U.S. State Export Edition. Annual 2009.  
<<http://www.gtis.com/state/>>

Yarns and Fibers Exchange. "China's 1st Quarter Textile Machinery Drops 61%." May 21, 2009.  
<[http://www.yarnsandfibers.com/news/index\\_fullstory.php3?id=18720](http://www.yarnsandfibers.com/news/index_fullstory.php3?id=18720)>

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