



2016 Top Markets Report **Industrial Automation** Country Case Study

Singapore

Singapore ranks seventh overall in this year's Industrial Automation Top Markets Report. Singapore is a highly industrialized Southeast Asian economy and Free Trade partner with the United States. While Singapore's growth has slowed in the past year due to low oil and gas prices, the government continues to invest in initiatives to improve productivity and advanced manufacturing, making it a target market for U.S. industrial automation exporters.

Overall Rank

7

2015 U.S. Exports:
10th

2009-2015 Export
Growth:
14th

2012 UNIDO Industrial
Competitiveness
Ranking:
2nd

UNIDO Industrial
Competitiveness
Growth Ranking:
9th

Subsector Rankings

Sensors and
Instruments:
5th

Electric Motors and
Actuators:
9th

Electrical Relays and
Industrial Controls:
7th

Material Handling:
15th

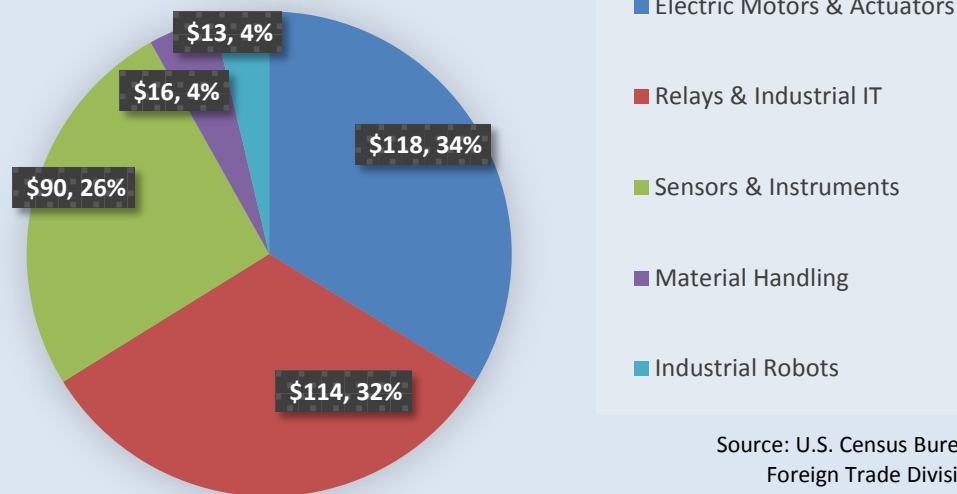
Industrial Robots:
8th

ITA expects that U.S. Industrial Automation exports to Singapore will grow moderately through 2017. In 2015, U.S. exports in the sector were valued at \$351 million. This was down a slight 2.6 percent from 2014's total of \$360 million, which was the first annual decline since the global recession in 2008. This is largely tied to Singapore's slowing economy, which has been hampered by low prices of oil and

diminished Chinese demand for Singaporean exports.ⁱ Between 2009 and 2015, however, U.S. exports grew at an average annual rate (CAGR) of 11 percent. As a result, ITA expects that opportunities will continue to grow moderately for U.S. exports to the Singaporean market.

Country Overview

Figure 1: U.S. Industrial Automation Exports to Singapore, 2015
(in USD Millions)



With a population of more than 5 million and half the landmass of greater London, Singapore is among the leading commercial and financial services hubs in the world. It is a developed free-market economy with one of the highest GDP per capita rates in the world, and it is a major exporter of electronics, machinery, pharmaceuticals, refined petroleum and more. In 2004, the United States-Singapore Free Trade Agreement entered into force, eliminating virtually all tariffs on U.S. exports. The country's emphasis on advanced technical education at the secondary and postsecondary levels has helped to attract strong investment by multinational corporations, and policies to improve production output, such as the National Additive Manufacturing Innovation Cluster (NAMIC), continue to reinforce Singapore's status as a destination for innovation and advanced manufacturing.

According to latest available U.N. trade data, the United States held 19.1 percent of Singapore's import market share for automation equipment in 2014, making it the largest partner that year. This was ahead of China at 19 percent, Malaysia at 10.2 percent, and Japan at 8 percent. 2014 was the first year since 2010 in which Singaporean automation imports from the United States were larger than those from China, and U.S. market share has risen nearly 5 percentage points between 2009 and 2014.

Export Overview

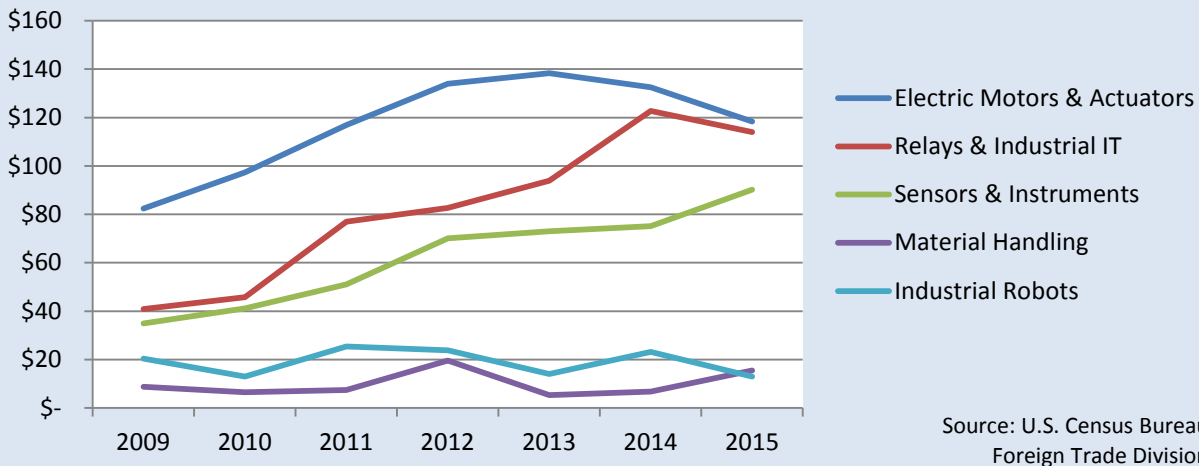
In 2015, Singapore was the fifth largest recipient of U.S.-made sensors and instruments, which totaled

\$90 million in exports. Purchases have grown at a rapid rate, growing year-on-year and averaging 17.1 percent in annual growth (CAGR) between 2009 and 2015. Process control instruments, including those for maintaining flow and liquid levels, experienced the greatest growth within this product category. ITA expects that sales opportunities will continue to be strong in this subsector through 2017.

Electrical relays and industrial IT product purchases totaled \$114 million in 2015, making Singapore the seventh largest market for U.S. exports in this subsector. Sales, however, decreased by 7.2 percent in this product category between 2014 and 2015, marking the first instance of decline since 2009. Nonetheless, ITA projects that growth in this subsector will continue through 2017, particularly as key infrastructure and transportation developments begin to take place.ⁱⁱ

Despite making up a relatively small proportion of U.S. exports to Singapore, sales of industrial robots in 2015 totaled \$13 million, making it the eighth largest U.S. export market for the product category. Purchases in this category typically have fallen under replacement parts and end-of-arm tooling, owing largely to the significant market presence of Asian robot OEMs, such as FANUC, Yaskawa and Mitsubishi, and more. U.S. exports of industrial robots were the only industrial automation product category to experience negative average annual growth between 2009 and 2015. ITA projects headwinds in this subsector through 2017 due to competing Asian brands.

Figure 2: Annual U.S. Industrial Automation Exports to Singapore, by Subsector (in USD Millions)



Exports of electric motors and actuators to Singapore totaled \$118 million in 2015. Proportionally this was the largest subsector of U.S. automation exports to Singapore. Singapore was the ninth largest purchaser of U.S. exports in this product category. Sales in this category were driven largely by electric and pneumatic actuators, which are commonly used with valves and taps in chemical processing and downstream oil refinement. Sales in this product category have declined every year since 2013, which was further indicative of the slumping oil economy. Besides industrial robots, electric motor and actuator sales were also the slowest growing subsector for Singapore, averaging 6.2 percent annually (CAGR). ITA projects that sales in this subsector will continue to face headwinds through 2017.

Singapore was the 15th largest export market in 2015 for U.S. material handling equipment, including conveyors and elevating apparatuses. Sales to Singapore totaled \$16 million in 2015, though year-to-year performance has been more volatile and prone to dramatic increases and decreases. Given Singapore's close proximity and trade relationship with low-cost suppliers like China and Malaysia, ITA projects that Singapore will remain a relatively small market for U.S. manufactured products in this category.

Challenges & Barriers

Singapore maintains a highly open and transparent business environment, and there are few formal market access barriers. In fact, Singapore is ranked

first by the World Bank Group for ease of doing business.ⁱⁱⁱ Singapore is also ranked second in the world by the World Economic Forum's Global Competitiveness Report for its commitment to Intellectual Property protection.

In many regards, the intense competition present in the Singaporean market cannot be discounted as a challenge. As a destination for top foreign investors from all across the world, competition is not local but global.

Know Your Buyer

As the commercial hub for Southeast Asia, Singapore is home to many agents and distributors that cover regional and local sales. Competition is stiff, and representatives are typically aggressive in courting new opportunities. Given Singapore's size, exporters will typically find one agent or distributor to suffice for local coverage, and a second potentially for greater Southeast Asian operations.

National and Regional Trade Shows

Automex 2016
 May 25-28, 2016 – Kuala Lumpur, Malaysia
<http://www.automex.com.my/>

Industrial Automation Fiesta 2016
 June 8-10, 2016 – Binh Duong, Vietnam
<http://vietnamindustrialfiesta.com/about-iaf-2016/>

Singapore International Water Week

July 10-14, 2016 – Singapore
<http://www.siww.com.sg/>

Asian Robotics Week 2016
November 23-24, 2016 – Singapore
<Http://robots-expo.com/>

ⁱ Michael Lingenheld “Slowdown in Singapore” *Forbes*, 13 August 2015.

<http://www.forbes.com/sites/michaellingenheld/2015/08/13/slowdown-in-singapore/#43e020ba6b67>

ⁱⁱ Lee U-Wen “Singapore Budget 2015: Infrastructure spending to grow by 50% to reach S\$30Billion” *The Business Times*, 23 February 2015

<http://www.businesstimes.com.sg/government-economy/singapore-budget-2015/singapore-budget-2015-infrastructure-spending-to-grow-by-50>

ⁱⁱⁱ <http://www.doingbusiness.org/rankings>