



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

Brazil

Brazil ranks 12th in this year's Industrial Automation Top Markets Report. Between 2009 and 2014, exports to Brazil grew at a significant rate. However, economic contractions and fiscal hardships are projected through the near term that will pose significant challenges to growth.

Overall Rank

12

2015 U.S. Exports:
7th

2009-2015 Export
Growth:
4th

2012 UNIDO Industrial
Competitiveness
Ranking:
23rd

UNIDO Industrial
Competitiveness
Growth Ranking:
14th

Subsector Rankings

Sensors and
Instruments:
9th

Electric Motors and
Actuators:
7th

Electrical Relays and
Industrial Controls:
9th

Material Handling:
4th

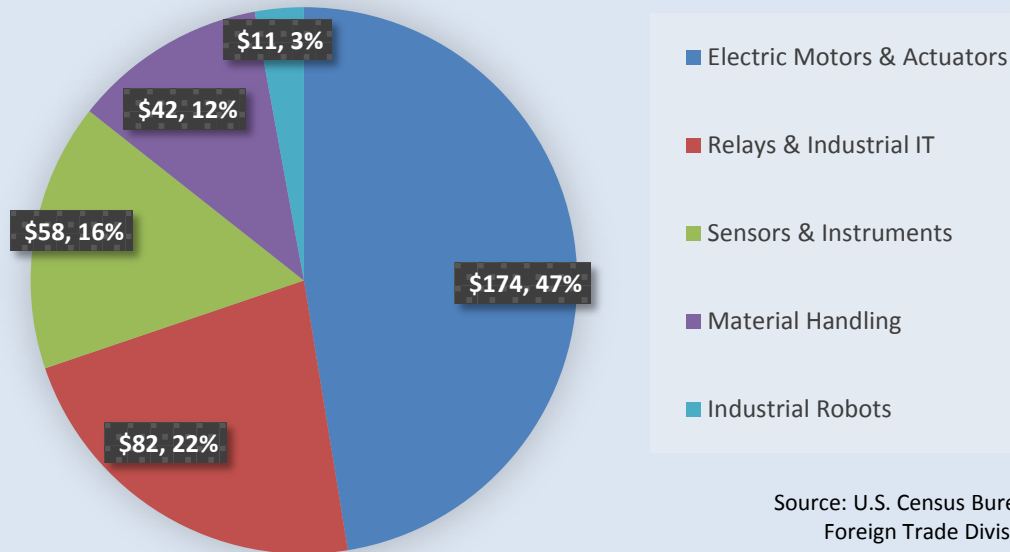
Industrial Robots:
10th

After experiencing a 6.8 percent decrease in 2015, ITA expects U.S. industrial automation exports to Brazil will continue to decrease through 2017. This is largely owing to Brazil's economic prospects, which analysts contend have "deteriorated significantly," and will require significant structural changes to be able to return to growth.ⁱ Tied to this assessment are currency exchange rates and the climbing value of

the U.S. Dollar against the Brazilian Real, which rose over 60 percent between 2014 and the end of 2015. Despite growing efforts to increase productivity in Brazil, given the economic challenges of a recession, ITA projects that exports to Brazil will continue to face headwinds in the automation sector.

Country Overview

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



Brazil is the fifth largest nation in the world by area, the sixth largest by population, and the seventh largest economy. As the “B” in BRIC nations (Brazil, Russia, India, China), Brazil has experienced rapid economic growth in the immediate aftermath of the 2008 global recession. It is by far the largest South American market. Brazil is a leading member of the MERCOSUR southern common market, which also includes Argentina, Paraguay, Uruguay and Venezuela.

According to latest available U.N. trade data, the United States captured 18.1 percent of Brazil’s import market for automation equipment in 2014, behind China with 23.7 percent. U.S. share was higher than Germany (11.4 percent), Italy (6.4 percent), and Japan (4.5 percent). Brazil’s economy remains largely structured around commodity production: agricultural products like soybeans and coffee, textiles, chemicals, metals, and more. It is also a regional producer of motor vehicles, producing the sixth highest volume of autos in the world in 2013.ⁱⁱ Brazil’s large supply of low-cost labor has worked as a competitive advantage in these industries. The country, however, has made strides toward greater manufacturing and processing productivity through automation. If it were not for the general economic malaise, the forecast for this Top Markets Study would remain quite positive.

In 2015, Brazil was the ninth largest purchaser of two industrial automation product categories. First,

Brazil’s economic conditions, however, are expected to worsen before getting better. According to the OECD, Brazil’s recession is forecast to continue through 2016, and the economy is to begin its slow recovery in 2017.ⁱⁱⁱ While Brazil will continue to rely on U.S. machinery and automation imports, ITA projects negative growth in the short-term.

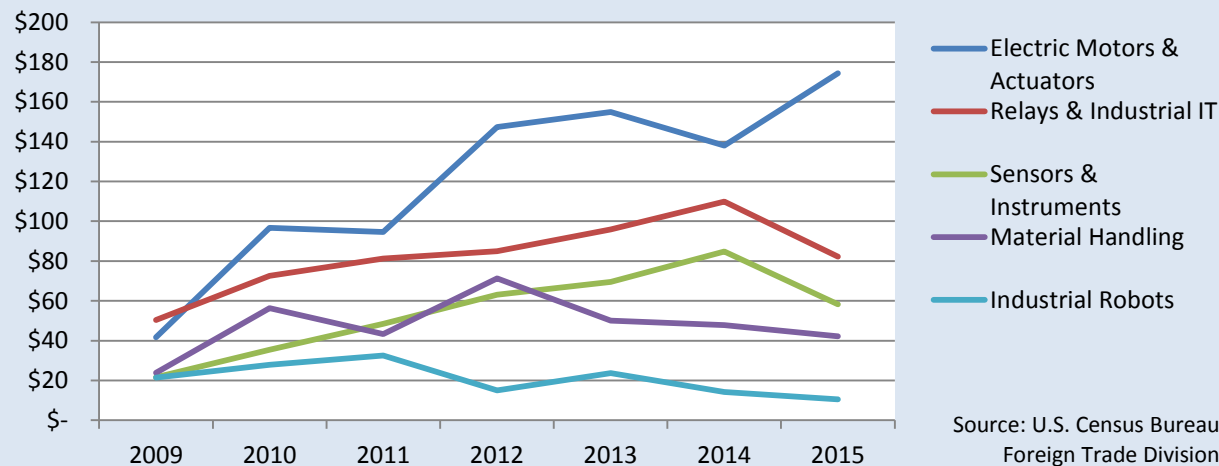
Export Overview

Brazil was the fourth largest U.S. export market for material handling products in 2015. Sales of conveyors and elevating equipment equaled \$42 million in 2015, which was down from a high of \$71 million in 2012. Sales have decreased every year since 2012 at an average rate (CAGR) of 16 percent. ITA projects that this trend will continue through 2017.

Electric motors and actuators made up the largest proportion by far of U.S. automation products sold to Brazil in 2015. Brazil was the seventh largest recipient of all U.S. products in this category, which totaled \$174 million in 2015. Electric motors and actuators were the only product category to experience growth in 2015, increasing by 26.3 percent from 2014 values. This growth is largely a result of oil pipeline investments, retrofitting automated valves and actuators across many pipelines.^{iv}

electric relays and industrial IT hardware - the sales of which totaled \$82 million - was down from a peak

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



value of \$109 million in 2014. Within this category, programmable controllers of less than 1,000 Volts made up the largest proportion of purchases and grew steadily in spite of the broader decline. The second, sensors and instruments, experienced the greatest sales drop of all product categories to Brazil from 2014 to 2015, declining 31.3 percent to a total of \$58 million. ITA expects sales of both product categories to decline through 2016. Industrial robots accounted for the smallest proportion of sales to Brazil out of the five subsectors. In 2015, Brazil received the 10th greatest volume of all U.S.-exported robots and end-of-arm tooling, totaling \$11 million. Sales were driven especially by parts and tooling, which made up over three-quarters of exports in the subsector.

Challenges and Barriers

Brazil maintains a number of protectionist policies that create market access barriers to U.S. exports. Tariffs are levied against many foreign-manufactured automation products. Similar to a sales tax for imported goods, tariffs are duties collected by the government and have the effect of raising prices on foreign goods. By raising prices, tariffs are intended to help domestic industry maintain cost-competitiveness against foreign producers. ITA maintains that tariff barriers meant to protect local industry do so at the expense of local consumers, who ultimately pay the price through lower-quality products. ITA continues to call on the Brazilian government to lower tariff rates to benefit Brazilian consumers. Exporters can find applied tariff rates here.^v

Brazil also poses a number of technical barriers to trade. One outstanding challenge remains the dispute over the Brazilian National Telecommunications Agency’s requirement to test certain ICT equipment (to include industrial IT equipment) in Brazil rather than by independent certification bodies.^{vi} The unnecessary duplication in testing and delayed time to market have been reported by numerous U.S. companies, and ITA continues to engage the Brazilian Government to seek resolution. The United States and Brazil continue to engage regularly on technical barriers to trade. Technical regulations generally are published in the *Diário Oficial da União* (the Official Gazette, equivalent of the U.S. Federal Register), and if the regulation is likely to affect trade, Brazil’s National Institute of Metrology, Quality, and Technology (INMETRO) is responsible for notifying the WTO to allow parties to comment.

Of concern to U.S. companies is Brazil’s generally weak record in intellectual property rights protection. Brazil is listed in the “Watch List” of the United States Trade Representative’s “Special 301” report for intellectual property rights (IPR) protection.^{vii} Brazil has fallen under the “Watch List” category since 2007, though much of these concerns remain over counterfeits of consumer goods and lack of transparency in pharmaceuticals and agrochem products, and not necessarily in automation equipment. The U.S. Government will continue to press Brazil to resolve these practices.

Know Your Buyer

Brazil is by far the largest South American market, one that dominates the surrounding regions both economically and commercially. Automation companies will typically partner with a local distributor, agent or integrator to complete sales. Companies are advised to do due diligence on local sales representation, paying particular attention to geographic coverage of major hubs like Brasilia, Sao Paulo, and Belo Horizonte. All importers must register with the Secretariat of Foreign Trade (SECEX) and comply with the computerized documentation system called the “Sistema Integrado de Comércio Exterior” (SISCOMEX).

Companies are advised to seek legal advice from local counsel before establishing sales channels within the country. For more information, exporters are advised to review the Brazil *Country Commercial Guide* or speak with a member of the U.S. Foreign Commercial Service in Brazil.^{viii}

National and Regional Trade Shows

FEIMEC

May 3-7, 2016 – São Paulo, Brazil
<http://www.feimec.com.br/Home/>

MECANICA

May 17-21, 2016 – São Paulo, Brazil
<http://www.mecanica.com.br/en/>

MEC Show

July 26-29, 2016 – Serra, Brazil
<http://www.mecshow.com.br/site/2016/pt/home>

EXPOMAC

September 21-24, 2016 – Curitiba, Brazil
<http://www.expomac.com.br/>

TeQ- Tecnologiaquimica

November 8-10, 2016 – Rio de Janeiro, Brazil
<http://tecnologiaquimica.com.br/en/>

ⁱ Kenneth Rapoza “Brazil’s Economy Hasn’t Been This Bad Since 1930” *Forbes*, 14 January, 2016
<http://www.forbes.com/sites/kenrapoza/2016/01/14/brazils-economy-hasnt-been-this-bad-since-1930/#7d33d3437dba>

ⁱⁱ Alan K. Binder, ed. “Ward’s Automotive Yearbook 2014” *Ward’s Automotive Group* (Southfield, MI), pg. 6

ⁱⁱⁱ <http://www.oecd.org/eco/outlook/brazil-economic-forecast-summary.htm>

^{iv} Michael Place “Brazil unveils US\$53bn energy investment plan” *BNAmericas*, 11 August, 2015.

<http://www.bnamericas.com/en/news/electricpower/brazil-unveils-us53bn-energy-investment-plan1>

^v https://www.wto.org/english/thewto_e/countries_e/brazil_e.htm

^{vi} United States Trade Representative “2015 National Trade Estimate Report on Foreign Trade Barriers: Brazil” pg. 39.

^{vii} United States Trade Representative “2015 Special 301 Report”, pg. 71

^{viii} <http://www.export.gov/ccg/brazil090732.asp>