

# Aerospace Global Industry

The global **aerospace**<sup>1</sup> and defense industry markets **grew 8.7%** annually in the 2005-2009 period, to a **920,600 million USD**<sup>2</sup> value.

The defense sector represents 71.8% of the market, while the (civil) aerospace sector represents 28.2% of the total industry. The sector is expected to reach a **1,190,000 million USD** value by 2014.<sup>2</sup>

The European aerospace industry generated production estimated at **127,800 million Euros** in 2008.

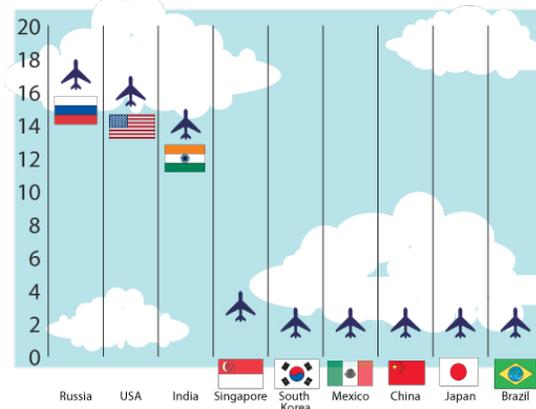


1. The sector is comprised of companies engaged in manufacturing, servicing, repairing, engineering, designing and providing auxiliary<sup>1</sup> services for commercial and military aircraft

## Mexico

Mexico is an important center for manufacturing and innovation; it is the country that boasts the largest **investment** in aerospace manufacturing and ranks 6<sup>th</sup> in terms of investment in **research and development**.<sup>3</sup>

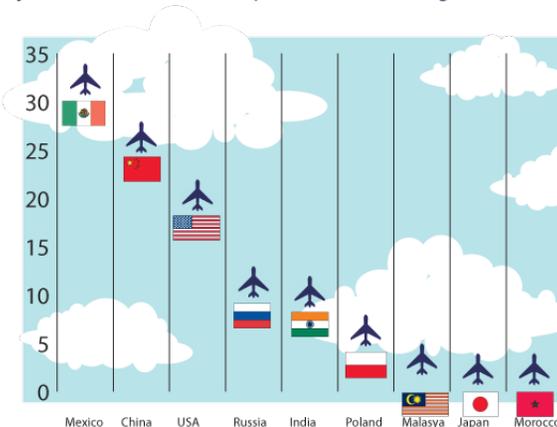
Major Investments in Engineering/Research and Aerospace Development, 1990-2009<sup>4</sup>



Sector exports in 2010 maintained their **16.5%** annual **growth** rate, valued at approximately **3,200 million USD**.

Mexico reported **232 aerospace companies** that employed **more than 30,000 workers** in 2010, and primarily serve the US, Canadian, German and French markets

Major Investments in Aerospace Manufacturing<sup>3</sup>, 1990-2009<sup>4</sup>



2. Source: Datamonitor

3. Includes strategic alliances and new investments for the major 121 OEMs, excluding acquisitions.

4. Source: Aerostrategy, 2009

## Success Stories

### General Electric

**Mexican engineers** are currently involved in the design of several components for Leap-X and Tech-X turbines. These turbines will have improvements in fuel consumption, lower maintenance costs, and reduction of NOx (pollution) and noise levels, according to increasingly restrictions to be implemented in airports around the world.



### Labinal

Labinal operates **two plants** in the state of Chihuahua that are focused on electrical systems.



The future plan is to bring other service lines to Mexico, thanks to the positive experience the company has enjoyed operating in Mexico over the last 20 years, where the great advantage has been based on Mexican engineering talent. Labinal is the company that offers the largest number of jobs in the entire sector, with more than **2,000 employees** including engineers and technicians.

### Bombardier (Learjet 85)

Bombardier opened its new plant in Querétaro Aerospace Park, with an investment of **255.9 million USD**. This project will generate approximately **1,105 direct jobs**.



The Learjet 85 is a project surrounded by technological innovation, the use of new compound materials for the production of structures such as the fuselage, wings, control surfaces, among other pieces, will facilitate the creation of a completely different airplane from the current Learjet models.

It is worth noting that at the time our country has not conducted any full assembly of a commercial aircraft. The production of the first Learjet 85, even if it is just a prototype is an achievement for the Mexican aerospace sector.

### Hawker Beechcraft

Hawker Beechcraft opened its second assembly and partial-assembly plant for major structural parts for planes in Chihuahua, investing **108.2 million USD** and creating **600 new jobs**.



The first facilities of this company were opened in October 2007 representing a 100 million USD investment and facilitating the creation of 380 jobs. This plant assembles single subsets from metal sheeting, and flight control surfaces.

# Mexico's Advantages



## Logistical Axis

Mexico's privileged geographic location makes it the country where the two most important global corridors of aerospace manufacture converge and its access to the Asian and European markets position it as a logistical aerospace manufacturing hub.<sup>5</sup>



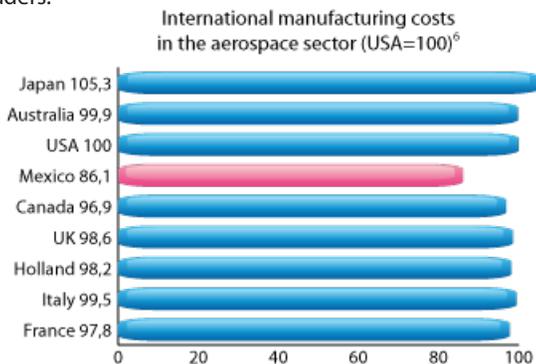
## Innovation

The OECD lists Mexico as one of the countries with the highest rate of technological sophistication (3.25) in manufactured products, with a rate above the OECD average (2.96) alongside with countries such as Japan and Korea.

Mexico designs innovative products by relying on its strength in engineering capacities, advanced manufacturing and materials availability.

## Competitiveness

According to the "Competitive Alternatives 2010" study published by KPMG, Mexico is up to 22% more competitive in terms of costs, than the current industry leaders.



5. Source: Business Intelligence Unit, ProMéxico, 2009.  
6. KPMG, 2010.

## Reliability

Mexico is a reliable country in terms of intellectual property laws and the use of sensitive technology for military purposes.

The US awards 5% of its total licenses to manufacture high tech military equipment to Mexico.

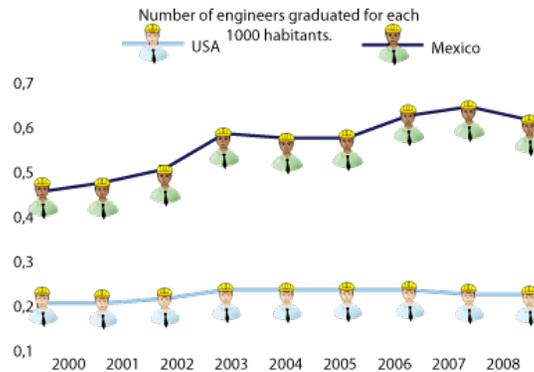
Our country's ability to attract dual-use high-tech projects will be substantially increased when Mexico joins international strategic business groups.

## Talent

Mexico has more than 745,000 university students in the engineering and technology careers, being the largest source of engineering talent in America.

Each year, 114,000 engineering and technology students graduate (three times more graduates in these fields per capita in the US).

Mexico is the most important center of engineering talent in America.



## Quality Infrastructure

Mexico is one of the few countries that has entered into a bilateral agreement for the mutual recognition of aeronautical certification - BASA (Bilateral Aviation Safety Agreement) with the U.S. Federal Aviation Administration (FAA), while companies operating in Mexico have certified their procedures in keeping with industry standards, such as ISO - 9001, AS 9100, and NADCAP (National Aerospace and Defense Contractors Accreditation Program).

## Strategic Goals

### National Manufacture and Integration



### MRO [Maintenance, Repair, Overhaul] Excellence Hub

### Manufacturing Platform A + D



## Institutions Related to the Sector



SE Secretariat of Economy



National Council on Science and Technology [CONACYT]



DGAC (Civil Aeronautics Administration) Secretariat of Communications and Transportation (SCT), Mexico



FEMIA [Mexican Federation for the Aerospace Industry]