

Wings of Innovation, Sky is not the Limit

Click on the content you want
to know more about.

MENU.

Click to return to this page.

**VALUE OF
THE INDUSTRY**

**MANUFACTURING
IN MEXICO**

**PICTURE AND
NATIONAL TRENDS**

**LEADERS AND
GLOBAL PICTURE**

DECISIONS

REFERENCES

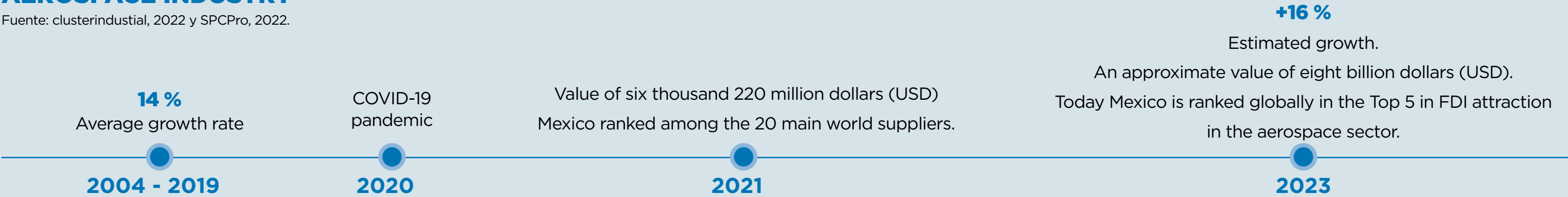
2-SP16-10-091

Publication date: December 11, 2023

Last review: December 11, 2023

AEROSPACE INDUSTRY

Fuente: clusterindustrial, 2022 y SPCPro, 2022.



VALUE OF THE INDUSTRY

The aerospace sector encompasses the design, manufacturing, and commercialization of airplanes, helicopters, unmanned aerial vehicles, missiles, spaceships, and rockets, as well as associated specific equipment, for instance, propulsion and navigation system, among others, as well as their supply chain and the corresponding maintenance services, repairs, and rehabilitation.

This sector is one of the main poles of industrial development in Mexico as it signifi-

cantly contributes to the growth of the economy. The evolution of this industry presents growth rates above the average from the rest of the manufacturing industry. Additionally, it is one of the main sectors that attracts foreign investment, not only because of the geographic position of the Mexican Republic and the commercial agreements signed with other countries, but also because of their skilled labor force and the experience in other high technology industrial sectors (SPCPro, 2022).

Before the COVID-19 crisis, the aerospace industry in Mexico grew at an average annual rate of 14% from 2004 to 2019. In 2023, it is projected to grow by more than 16% to reach US\$9.72 billion. By 2028, it is estimated to be worth US\$19.71 billion, representing an average annual growth rate of around 15% (Mordor Intelligence, 2023).

The industry is also expected to stabilize in 2025 and reach exports of more than US\$12 billion (Gozain, 2022).

MANUFACTURING IN MEXICO

Today, there are approximately 386 aerospace companies in Mexico, 79% of them are focused mainly on manufacturing, 11% on engine repair and construction, and another 10% on research and innovation (Referente, 2023).

The main products and services produced in Mexico are components for propulsion systems, aero structures, aircraft interiors, landing systems components, electric and electronic systems, precision machinery, plastic parts, superficial treatments, composite materials parts, engineering and design, as well as MRO (Maintenance, Repairs, and Operations) services (bciaerospace, 2022).

Images: Freepik in Flaticon., 2022.

GLOBAL VALUE CHAIN

Aerospace Sector

The capacities of Mexican manufacturers include several TIER 1 and TIER 2.



OEM

Original Equipment Manufacturer

Large manufacturers who manufacture and sell final products, for instance engines, airplanes, satellites, and helicopters.



TIER 1

Manufacturers of products and components which go directly to the final assembly line, such as wings, landing gear, fuselage, harnesses, and seats, among others.



TIER 2

Manufacturers of systems, subsystems, and fully assembled components to be expedited to TIER 1 companies. Companies that supply parts that will be integrated to a Tier1 component, for instance: machining, connectors, cables, insulators, composite materials, sheeting, and switches.

Source: Sector Aeroespacial: Oportunidad De Crecimiento Para La Industria Mexicana | <https://mexicoindustry.com/>



M
E
N
U

CIC



MEXICO'S AEROSPACE CLUSTERS

The 5 most relevant clusters in operation are the following.

Baja California

This is the largest and oldest aerospace cluster in Mexico, always standing out for its innovations in the design of aircraft interiors, as well as for their complete integration tests. The cluster's specialty is the precision machinery, electric and hydraulic systems, and metallic plates formation processes. It is the second destination of the FDI of the sector, with an accumulated investment of 716.69 million dollars (USD) (1999-3T 2020 period). Some of the companies located here are Honeywell, Grupo Safran, Collins Aerospace, Gulfstream, and Lockheed Martin.

Chihuahua

It occupies the third place for accumulated FDI, with 682.56 million dollars (USD) received (1999-3T 2020 period), specializing on high precision machining, aero parts, harnesses, sea emergency landing equipment, seats, and thermal and chemical treatments for metals. Some of the main companies located in the cluster are Beechecraft, Bell Helicopter, Honeywell, Ez Air, Kaman Aerosystems, Grupo Safran, Soisa Aircraft Interiors, or Textron Aviation, among others.

Sonora

It is ranked as the fifth state recipient of accumulated FDI with 238.90 million dollars (USD) (1999-3T 2020 period). It focuses on the production of turbines, foundry processes, machining and secondary products, aerostructures, and composite materials. It is also working on new capacities in the sector, such as machining and chemical treatments, and in the turbine area, it is working on forging, foundry, and coating. Some of the companies of the cluster are Goodrich, Rolls-Royce, Esco, Radiall, Williams International, Incertec, Bodycote, Ducommun AeroStructures, Groupe Latecoere, or Daher.

Nuevo León

It is the fourth main recipient of FDI of the sector, with an accumulated investment of 341.26 million dollars (1999-3T 2020 period). Some of the main companies are Aero Alterno, Azor, Aerovitro, Aeisa, Cimsamex, Hemaq, Misma, and Quimmco.

Querétaro

It is the main recipient of FDI of the sector, with an accumulated investment of 989, 71 million dollars (USD) (1993-3T 2020 period), with the US as the main investor. The main exports concentrate on assembly goods, manufacturing of aircrafts or aero parts, turbojets, landing gears and their parts, and goods intended for the repair or maintenance of aircrafts and their parts. Some of the companies operating in the region are Bombardier, Aernova, Airbus, ETU División Aeronáutica, Global Composites Manufacturing, HYRSA, ITP Aero, RYMSA, or PCNC.

Source of information: Sector Aeroespacial en México | <https://www.icex.es/icex/>



PICTURE AND NATIONAL TRENDS

In 2022, Mexico's aerospace industry was highly fragmented, which means that there is no a clear dominant competitor within the industry. By 2027, it is expected to remain fragmented and growing (Technavio EMIS University, 2023).

Mexico has enough capacity to substitute a large part of their imports of the aerospace sector with local production, which attracts the establishment of foreign capital manufacturers thus enabling a larger integration of small and medium-size Mexican enterprises (SMEs) to the global supply chain.

There is important support from the Mexican government to bolster the growth of the aerospace industry through several strategies and initiatives. An example of this is the country's strategic plan for the aerospace industry (Mordor Intelligence, 2020).

Image. Pixabay in Pexels, 2022.



The recovery of the travel industry will have a positive impact on airlines; consequently, the increase in routes and flights will bring forth an increase in the demand for maintenance and repair services. The commodities offer is expected

to extend towards products and services such as composite materials, raw material, metal sheets, forged pieces, special processes, foundries, engines and rotors, hydroforming, soft products, and thermoforming coating.

LEADERS AND GLOBAL PICTURE

In 2020, the value of the aerospace market hardly reached 298 billion dollars (USD), given the hard blow that the crisis brought about by the pandemic inflicted on the industry. A recovery is expected as of 2022 and in 2025 the market value could reach 430 thousand 900 million dollars (USD) (bciaerospace, 2022).

On the other hand, the global production of the aerospace industry is concentrated in 20 countries, representing 95% of the global production value. The United States of America is positioned as leader of the industry, due mainly to the large companies established in that country, their large volume of exports, and the robustness of

Image. DCStudio in Freepik, 2022.

The global aerospace industry is forecasted to experience a faster growth throughout the 2022-2026 period as a result of, first, the global recovery of the airline industry, second, the increase in military expenses in this area, and third, the increment of the demand in the space sector (*Passport*, 2022).

their aviation industry. Several European countries also play an important role in that sector's world production given their deep integration into the global supplying chains. The companies Airbus SE and The

Boeing Co. have been competing for the lead in the global aerospace sector. China has gained ground in this sector: today it is ranked in the third place as manufacturer in the international context. (*Passport*, 2022).

DECISIONS

Even when there are many countries investing on this industry, it is also true that in many of them, this is not a significant sector in their productive activities, thus they are forced to import whatever they need. For instance, in 2021, Ireland recorded a high deficit in the international trade of aircrafts and spaceships; ironically, this circumstance represents an opportunity for nations who supply for the aerospace industry that can meet not only the Irish demand, but also that of many other countries who experience the same situation (World's Top Exports, 2022).

- Is the Mexican aerospace industry ready to compete in the foreign market?
- Can it be regarded as locally and internationally competitive?
- Are there any elements in the local market that benefit or hinder this possible internationalization?
- Which countries should it focus its interests on?
- Which type of product of the industry would be the best candidate for exports?

REFERENCES

Aerospace industry in Mexico. (s/f). Mexico, Querétaro:

<https://mexico.bciaerospace.com/index.php/en-us/participants/aerospace-industry-in-mexico>

Aguilar, Rubén. (2020). Industria aeroespacial. *El Economista*:

<https://www.eleconomista.com.mx/opinion/Industria-aeroespacial-20200105-0078.html>

Mordor Intelligence. (2023). "Industria aeroespacial - en México análisis de tamaño y participación - tendencias y pronósticos de crecimiento (2023 - 2028)":

<https://www.mordorintelligence.com/es/industry-reports/aerospace-industry-in-mexico>

DataMexico. (2021). "Fabricación de Equipo Aeroespacial":

<https://datamexico.org/es/profile/industry/aerospace-product-and-parts-manufacturing>

Deloitte. (2020). "Global Aerospace and Defense industry outlook":

<https://www2.deloitte.com/global/en/pages/manufacturing/articles/global-a-and-d-outlook.html>

Díaz, L. O. (2022, abril 6). "La industria aeroespacial en México y su potencial decrecimiento". SPC Pro:

<https://spcpro.com/2022/04/la-industria-aeroespacial-en-mexico-y-su-potencial/>

© Euromonitor Passport. (2022). "Global Overview of the Aerospace Industry. Global Overview of the Aerospace Industry, I, 47". De Euromonitor Passport. Base de datos.

Gozain, Antonio. (December 27, 2022). "Aerospace Sector on Its Way to Growth in 2023". Mexicobusiness.news:

<https://mexicobusiness.news/aerospace/news/aerospace-sector-its-way-growth-2023>

Juárez, Pilar. (2022). "Creceará 16% industria aeroespacial en 2022":

<https://a21.com.mx/index.php/aeroespacial/2022/07/14/crecera-16-industria-aeroespacial-en-2022>

Mordor Intelligence. (2020). "Aerospace industry in mexico" (2021 - 2026).

Mordor Intelligence, I, 97. (20/07/2022). De EMIS University. Base de datos.

Mordor Intelligence. (2022). "Industria aeroespacial en México: crecimiento, tendencias, impacto covid-19 y pronósticos (2022 - 2027)".

Mordor Intelligence, I, 96. (20/07/2022). De EMIS University. Base de datos.

Ochoa, Laura. (2022). "La industria aeroespacial en México y su potencial de crecimiento". Control Estadístico de Proceso: <https://spcpro.com/2022/04/la-industria-aeroespacial-en-mexico-y-su-potencial/>

Olmedillo, Jorge y Rabanal, Lucía. (2020). Sector aeroespacial en México. España. Exportación e Inversiones, I, 9. De ICEX España Exportación e Inversiones. Base de datos.

Pineda, Mauricio. (2021). "Industria aeroespacial en México: oportunidades y nuevas fronteras". Modern Machine Shop:

<https://www.mms-mexico.com/articulos/industria-aeroespacial-en-mexico-oportunidades-y-nuevas-fronteras>

Referente. (29 de agosto de 2023). Industria aeroespacial, crecimiento anual de 2 dígitos:

<https://www.referente.mx/2023/08/29/industria-aeroespacial-crecimiento-anual-de-2-digitos/>

Technavio EMIS University. (2023). Aerospace Market in Mexico 2023-2027:

https://0-www-emis-com.biblioteca-ils.tec.mx/php/search/docpdf?doc_id=791286346

Vázquez, Víctor. (2022). "Querétaro, receptor del 50% del IED aeronáutico en la última década: Sedesu". Mexico

Industry: <https://mexicoindustry.com/noticia/queretaro-receptor-del-50-del-ied-aeronautico-en-la-ultima-decada-sedesu-->

Workman, Daniel. (2022). "Aerospace Exports by Country". World's Top Exports:

<https://www.worldstopexports.com/aerospace-exports-by-country/>

