



Baja California participates in the advancement and manufacture of a wide variety of medical devices used around the world, which are essential in the detection and treatment of many health conditions

Globally the Medical Device market size is valued at **495 billion USD** in 2022 and calculated a growth up to **720 billion at the end of 2030**. In addition, the **United States** Market size is valued at **189 Billion in 2022** and estimated growth to **265 Billion by the end of 2030**.

In 2021 Baja California traded **USD 44 Billion** to California, mainly in export goods derived from manufacturing. ***The Medical device industry represents around 4 Billion USD of trade to the US just in that industry.***

Baja California

Baja California is Mexico's western state, located just south of California. This region is identified for its high-quality labor force; thanks to skills from the different industries of Baja California, and more than **+60 years** of experience in manufacturing, the best practices are shared between industries, providing better quality, on-time delivery, and cost reduction.

The proximity to San Diego, California, is one of the main attractions for companies established in Baja. ***"Their products are manufactured, packed, prepared, and distributed throughout the United States."***¹



IMMEX

The **IMMEX program** allows manufacturers to find a competitive manufacturing price and logistics costs reduction. The exemption of import duties can apply to raw materials, components, and equipment, as long as they are in the country temporarily and exported back to the U.S. or Canada.

Medical tourism has generated around **5 Billion USD in Baja California**; with a great variety of medical facilities, the state attracts millions of tourists searching for medical attention.

Medical Device in *Baja California*

Baja California ranks 1st place in medical devices manufacturing in North America, is the 8th largest exporter of medical devices in the world, and is the leading supplier of medical devices to the United States.

There are **+80 companies** located in Baja California, for medical device manufacturers that provide over **74,000 jobs**, with a youthful workforce with an **average age of 30**.

Plenty of class I, II and III Medical Devices products are manufactured in Baja California, such as *prosthetics, ophthalmic lenses, wheelchairs, valves, catheters, disposable intravenous sets, syringes, respirator components, micropipettes, pacemaker batteries, urine bags, and surgery kits, among others.*

For that reason, **90% of medical device** companies are certified under ISO13485, FDA, or other standards and regulations.

Examples of companies



Growth Platform

1 — TALENT

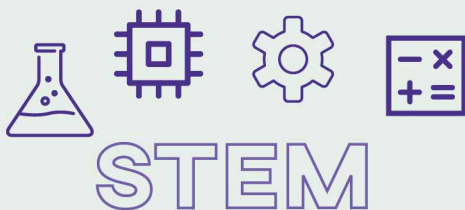
Supporting an industry that concerns high-end manufacturing, such as medical devices, requires a prepared workforce for innovation; investment in education and research is fundamental on both sides of the border.

Medical Companies usually approach the local universities to create programs in which talent is co-prepared in a collaboration between the companies and the universities, intending to prepare students once they graduate to get a secure position in the industry.

Baja California offers 89 public & private universities

9 Universities with Cross-Border Partnerships

Baja California has three research centers dedicated to scientific research; Nanosciences, Nanotechnology and Oceanology.



In 2021, engineering was the STEM field with the highest number of degrees conferred at **3,700**, followed by health sciences at **2,500** degrees in Baja California.²



San Diego had nearly **34,000** workers dedicated to scientific research and development services, over **23,000** employees in computer systems design and related services, and nearly **12,000** employees at colleges and universities.³

2

CALIFORNIA SINERGY INTERACTION

A substantial benefit of locating manufacturing operations in Mexico is its proximity to the United States. Given the significance of cross-border activity in the region, border relations seriously impact the region's economy and workforce. In recent years, the binational region between California and Baja California has been rapidly growing in terms of population and economic activity.

**Population
7.1 Million
(San Diego,
Imperial Valley,
Baja)**

California, USA

Baja California,
MEX

The busiest land-border crossing in the world.

Some of the people crossing live in one country and work or go to school in the other.

+106 million

People a year cross the border
in the San Diego and
Baja California region

+60,000

Cross-border people live
in Baja California and
work in the U.S.

+4,700

Cross-border people live
in San Diego and Imperial
counties and work in Mexico.

+160,000

San Diegans living in
Baja California

The region's manufacturing strengths largely reflect the capacity of Baja's production facilities. Baja's medium and high skilled labor pool across industries adds enormous value to the region.

San Diego's strength in biotechnology, pharmaceuticals, and genomics attracts significant interest from investors to California and Baja California.

Continued infrastructure investments, such as the Otay Mesa East port of entry, are needed to enable the CaliBaja region to contribute to the growth of U.S.-Mexico production and trade in the coming decades.³

3

STERILIZATION

California and Baja California offer a variety of processes to sterilize medical products, such as:

E-BEAM

Penetrates medical devices and pharmaceutical products in their final shipping containers.

ETO Sterilization

Can sterilize critical items that are heat - or moisture-sensitive without deleterious effects on the material used in the medical devices.

Gamma Irradiation

Delivers adequate penetration of thick products and is excellent for many types of materials and packaging & can be used for many applications and products.

4

The Med Dev Hub in Baja California

In 2010 Össur, a medical device OEM, opened an assembly facility in Tijuana. The positive outcomes motivated its leaders to invest further in final product configuration and complex machining operations.

Their medical parts required chemical coating and plating processes, a challenging anodizing process with a specific capability to control thickness.

This anodizing process was critical to the success of the complex machining operation expansion, with no suppliers in Latin America, there was only a company with the desired experience for this complex process in Los Angeles, California.

Within weeks of analyzing the project, the President of the LA company decided to invest in the region, taking the orthopedic company as an initial project.

Since 2016, BAP Aerospace de Mexico has operated a dedicated anodizing line owned by Össur that meets their requirements, and other aerospace projects in the region. A remarkable example of the integration of this Tijuana industry HUB.

BAJA STATEMENT

Living' the Baja manufacturing way

[Mr. White is a medical device senior designer engineer that lives in Del Mar, 65 Kilometers from the border with Tijuana. He travels southbound to Tecate, Baja California, to discuss with his local department established in the region about an NPI (New product development).

After the meeting, at lunchtime, he drives west to Tijuana and has lunch at a BajaMed cuisine restaurant with potential suppliers for the new project. After a successful talk, he drives back home with little to no delays to watch Thursday Night Football with his family.]

- Anonymous

The ease of commuting between Baja California and California is one of the most outstanding topics the companies now face. It is a modern way of living that captivates the environment and continues to develop its personality.

30 min

**Of commute between
Baja California and
California.**

TOP 15 MEDICAL DEVICE COMPANIES WITH THE REGION OF BAJA-CALI

	Medical Device Company	Revenue (billions)	Location
1	Medtronic	31.7 B	Baja California
2	Abbott	30.01B	California
3	Johnson & Johnson	27.10 B	California
4	BD	20.25 B	Baja California
5	Siemens Healthineers	20.20 B	Baja California
6	Medline Industries	20.10 B	Baja California
7	Fresenius Medical	19.40 B	Baja California
8	Philips	19.20 B	Baja California
9	GE Healthcare	17.72 B	California
10	Stryker	17.10 B	Baja California
11	Intuitive Surgical	5.96 B	Baja California
12	Teleflex	2.80 B	Baja California
13	ICU Medical	2.5 B	Baja California
14	Nordson Medical	609 M	Baja California
15	Scantibodies Laboratory	290 M	Baja California

WHY BAJA CALIFORNIA?

#1 State Exporter manufacturer in Mexico.

#1 North America's **Medical Device MFG Capital**.

+250 Contract Manufacturing companies in Baja.

+120 Industrial Parks in Baja California.

#1 Exporter of displays **Tv's sets**.

2nd Computers exporter.

#1 Aerospace Manufacturing state (High Mix - Low Volume).

+60 Years of **manufacturing experience**.

X3 Seaports available (**San Diego, Long Beach & Ensenada**).

X5 Ports of entry to USA (a six one under construction).

X3 International Airports (San Diego, Tijuana & Mexicali).

29 Agreements for the Promotion and Reciprocal Protection of Investment (**APPRI**s) **with 30 countries**.

14 Free Trade Agreements in Mexico with **50 countries**.



WE ARE HERE



CALI-BAJA BORDER

1 PORT OF SAN YSIDRO

2 CROSS BORDER EXPRESS (CBX)

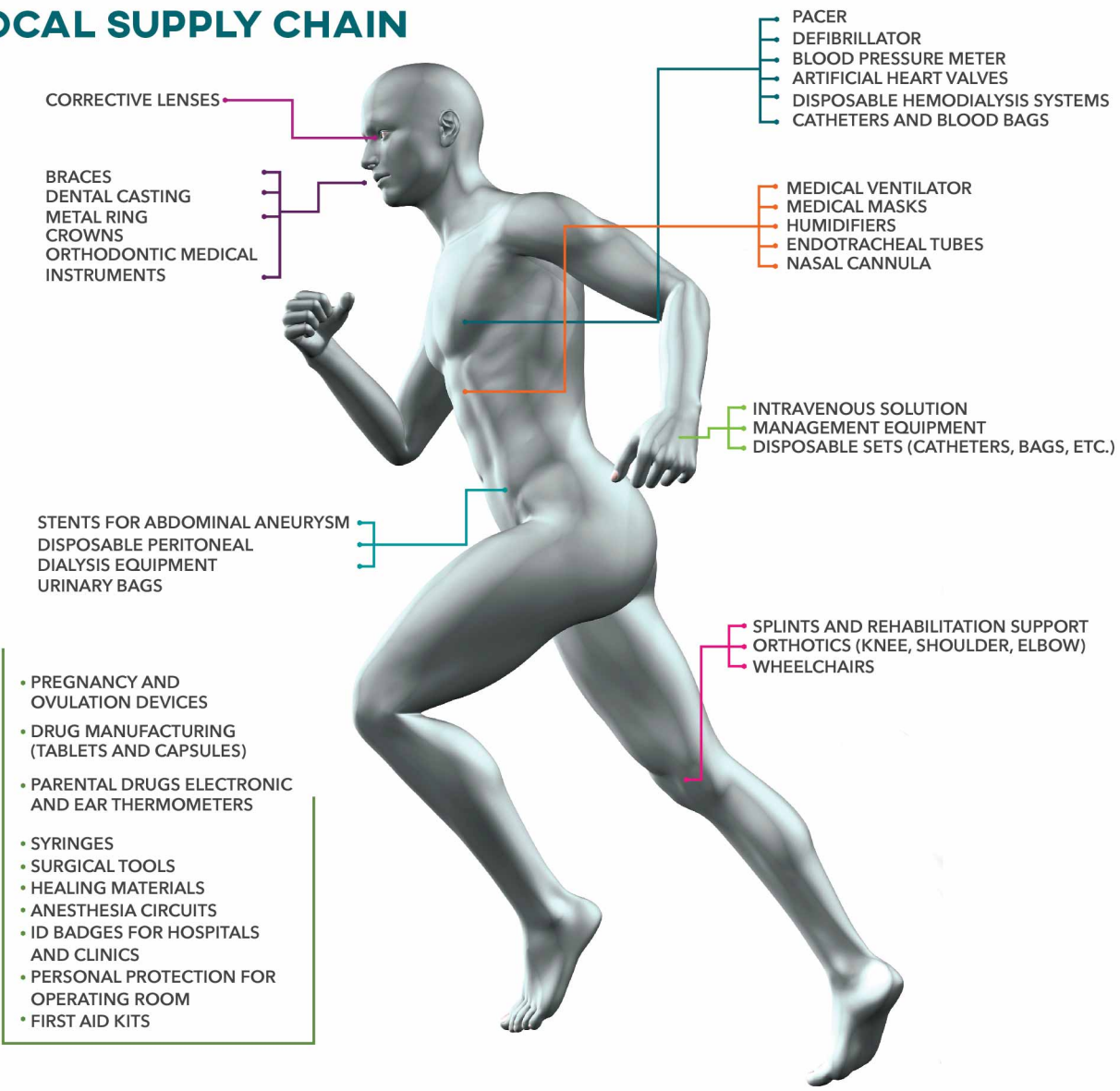
3 TIJUANA INTERNATIONAL AIRPORT

4 OTAY BORDER CROSSING

5 PORT ENTRY UNDER CONSTRUCTION



LOCAL SUPPLY CHAIN



7 Business Gaps & Opportunities for Baja California

Electronics

PCB Assembly
Surface Mount Technology
Semiconductors

Metalmechanics

High tolerance CNC Machining
High tolerance CNC Nanomachining
Metal Casting

Special Treatments

Heat treatment
Chemical processes

Plastics

Plastic Injection Molding

Extras

Medical grade Titanium
Steel
Label Printing
Non-Destructive Testing

QUOTES

"Baja is where Vision and Potential meets Capability and Determination."
- Latam Ops Director

"Baja California remains at the forefront of medical tourism in Mexico."
- Medical Tourism Consultant

"Baja California's greatest strength is its more than 60 years of experience in industrial and manufacturing processes, as well as the integration of innovation in line with global market trends." - Director of MFG

"Manufacturing in Baja California is a faster and cost-effective way without risking the quality of the products." - Quality Engineer for Medical Devices

1 Associate of Tijuana EDC.

2 Asociación Nacional de Universidades e Instituciones de Educación Superior.

3 University of San Diego Knauss School of Business - The Ahlers Center for International Business.
(2022). *The CaliBaja Regional Economy: Production, Employment, Trade & Investment.*

2022 MEDICAL DEVICE INDUSTRY IN BAJA CALIFORNIA



This document was proudly developed by the Pro Baja team, a group of organizations gathered with the government to promote the region of Baja California.



BAJA



CALI