

AEROSPACE INDUSTRY



**BUSINESS GAPS & OPPORTUNITIES
FOR BAJA CALIFORNIA**



INTRODUCTION


To support the growth of the aerospace industry, the *Tijuana EDC* has been working to develop a strong network of suppliers and service providers in the region. This has included the establishment of specialized processes in the area to ensure industry's supply chain needs.

Overall, the development of a strong *supply chain* is critical for the success of the aerospace industry in Baja California.

This is why based on a survey of aerospace companies in the area, these are the open *opportunities* to foreign companies strength the wellness of the supply chain of the companies at *Baja California*.

AEROSPACE

BAJA CALIFORNIA



AERO SNAPSHOT

Baja California is one of the most active regions for aerospace manufacturing in Mexico; with more than **70 companies** established for aerospace manufacturing, **+18 companies directly for aerospace or OEM's** and the rest are suppliers for aerospace and other industries.

The exports in the Aerospace industry range annually **4,5 billion** dollars of trade.

✧ INEGI

The Aerospace industry provides **17,000 jobs** for individuals in Baja California, with a youthful workforce with an **average age of 30 years**. The distribution of talent in any aerospace facility spread into **70% of direct employees (Blue collar), 20% of engineers, and 10% of managing roles**.

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

✧ ANUIES

LOCAL SUPPLY CHAIN INTEGRATION FOR AEROSPACE INDUSTRY:



15% in the region of Baja California and California

This results in 15% of sub-assemblies, components, raw material, additional services, and supplies demanded locally; The rest is provided by global suppliers, signifying a higher cost and higher times for delivery.

85% of occupancy overall

An average of 15% available space for further production is what most aerospace companies have. As the region is highly active and its labor force delivers outstanding results than the initial expectations, new production lines will shortly occupy this space. They conclude by expanding their operations, demanding larger spaces, requiring more specialized jobs, and reducing time on delivery & costs.

Special Treatments

- ▶ Plating
- ▶ Metal plating
- ▶ Chemical treatment
- ▶ Heat treatment
- ▶ Electro-plating
- ▶ Zinc nickel plating
- ▶ Masking process
- ▶ Dip braze
- ▶ Sandblasting
- ▶ Aerospace painting

Special Processes

- ▶ Insulation
- ▶ Composite autoclave
- ▶ Extrusion: Silicone hoses
- ▶ Destructive testing
- ▶ Non destructive testing
- ▶ Additive manufacturing

Raw Materials and components

- ▶ Hook & loop fastening (tapes)
- ▶ Fiberglass aerospace grade
- ▶ Titanium
- ▶ Inconel
- ▶ Steel
- ▶ Aerospace Aluminum
- ▶ Aluminum Alloys

Aerostructures

- ▶ Metal aerospace structure manufacturing
- ▶ Carbon fiber structure manufacturing
- ▶ Module integration

Interior aircraft

Composites

- ▶ Simple laminates and panels
- ▶ Honeycomb panels manufacturing/Racks

Electrical-Electronics

- ▶ PCB assembly
- ▶ Surface mount technology
- ▶ Electro- mechanical assembly/components
- ▶ Electric motor winding
- ▶ Electronic circuit assembly
- ▶ Cable & harnesses
- ▶ Wire harness
- ▶ Connectors
- ▶ Semiconductors
- ▶ Microelectronics
- ▶ Displays sets for interiors
- ▶ Electronic chassis

Components

- ▶ Sensors
- ▶ Rotors-motors
- ▶ Upholstery
- ▶ Thermal blankets
- ▶ Band
- ▶ Bearing
- ▶ Blanket
- ▶ Bracket
- ▶ Chassis
- ▶ Cover
- ▶ Deflector
- ▶ Doubler
- ▶ Flange
- ▶ Frame
- ▶ Gasket/Ring
- ▶ Spacer
- ▶ Handle
- ▶ Hinge
- ▶ Plate/Panel
- ▶ Retainer
- ▶ Seal
- ▶ Shield
- ▶ Spring
- ▶ Tubes/Duct

Fabrications

Metalmechanics

- ▶ Sheet metal forming
- ▶ Fourslide forming
- ▶ Hydroforming
- ▶ Hard metal forming
- ▶ Precision turning
- ▶ Mechanical mayor and small assemblies
- ▶ Tooling-fixtures
- ▶ Big punch press

Machining

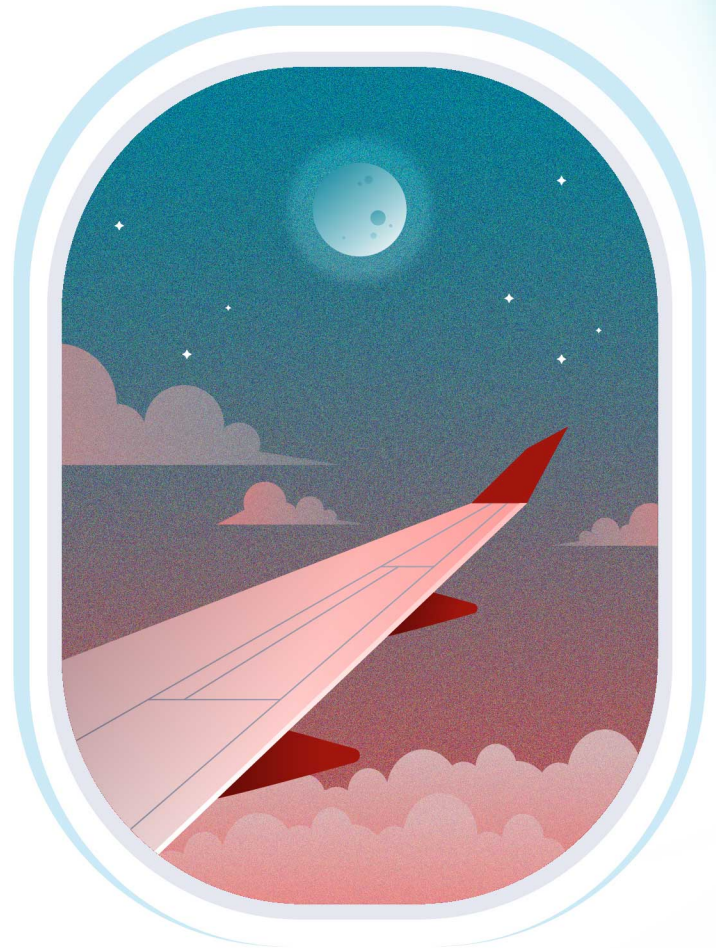
Medium & high tolerance

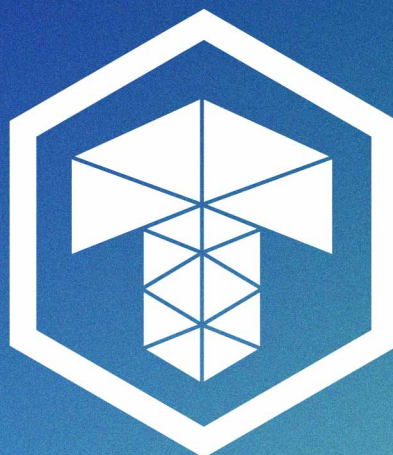
Nanomachining

- ▶ Housing/Carrier
- ▶ Large housing/Front frame
- ▶ Gear/Shaft
- ▶ Plate/Cover
- ▶ Blade/Vane/Hot-cold
- ▶ Case/ Duct/Combustor
- ▶ Poppet/Valve
- ▶ Small hardware
- ▶ Ring/piston ring/Shroud
- ▶ Chassis/Panel/Shield
- ▶ Bracket/Strut
- ▶ Seal/BTP
- ▶ Wheel/ Impeller/Disk
- ▶ Diffuser/ Nozzle/Stator
- ▶ Nozzle jets/Manifold
- ▶ Bearings
- ▶ Wheel/Brake parts
- ▶ Plate/Cover/Adapter
- ▶ Bracket/Mount/Clevis
- ▶ Gasket/Shim

Castings and forgings

- ▶ Housing/Carrier
- ▶ large housing/Front frame
- ▶ Gear/Shaft
- ▶ Plate/Cover
- ▶ Blade/Vane/Hot-cold
- ▶ Case/ Duct/Combustor
- ▶ Poppet/Valve
- ▶ Small hardware
- ▶ Ring/Piston ring/Shroud
- ▶ Chassis/Panel/Shield
- ▶ Bracket/Strut
- ▶ Stack lamination/Core Assy
- ▶ Seal/ BTP
- ▶ Wheel/Impeller/Disk
- ▶ Tube
- ▶ Diffuser/ Nozzle/Stator
- ▶ Nozzle jets/Manifold
- ▶ Bearing
- ▶ Shield
- ▶ Spring/Various
- ▶ X2-Plastic/Rubber
- ▶ Wheel/Brake part
- ▶ Filter/Screen
- ▶ S-7 Composite
- ▶ Bracket/Mount/Clevis
- ▶ Non-Metallic
- ▶ Gasket/Shim





This document was proudly generated with the support of our president members.



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