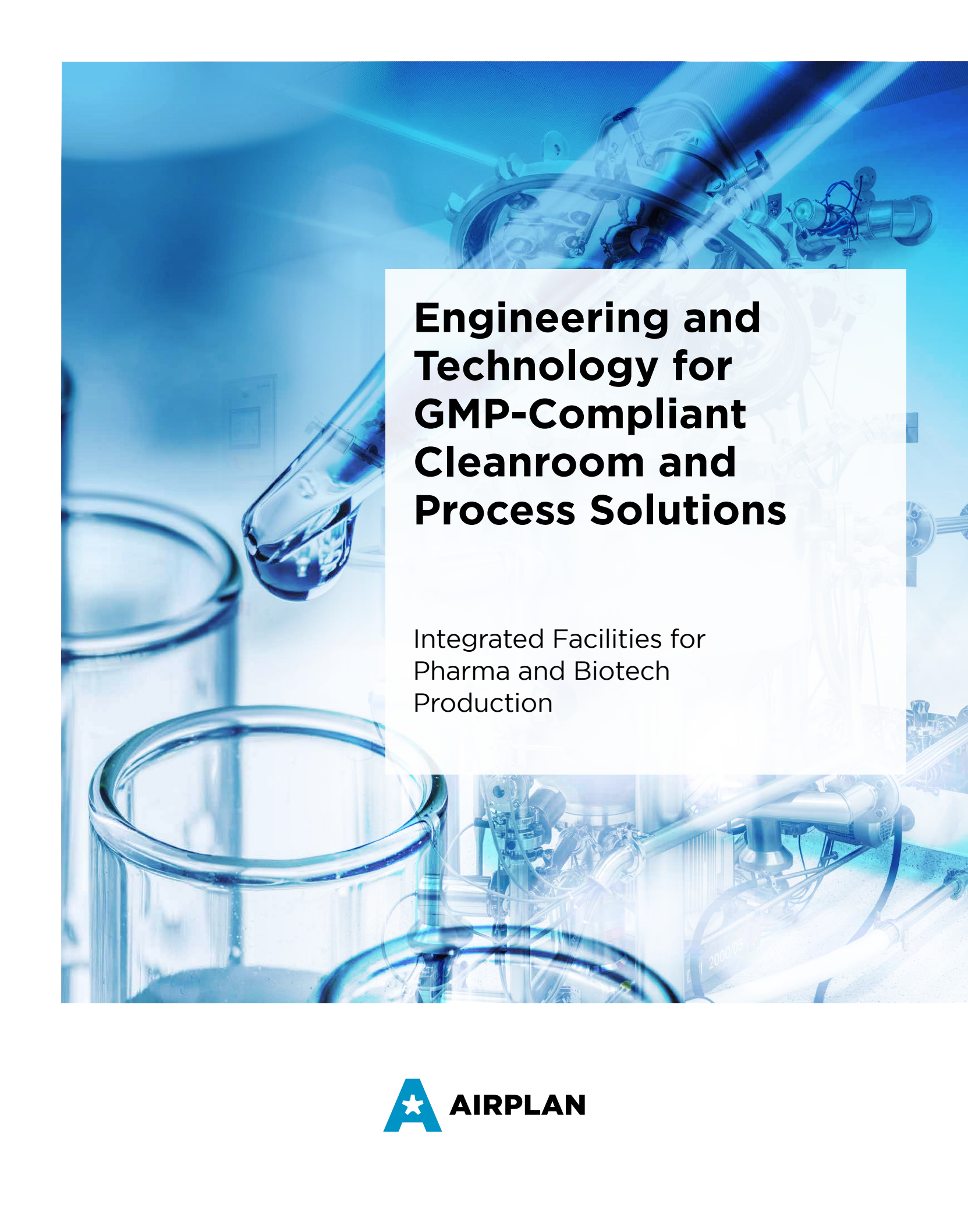




Engineering and Technology for GMP-Compliant Cleanroom and Process Solutions

Integrated Facilities for
Pharma and Biotech
Production

Your partner in
cleanroom and
process solutions
**for the Life
Science industry**



AIRPLAN is a Spanish company specialized in the design and delivery of turnkey cleanroom infrastructures, process technologies, and sterile air systems — tailored to the pharmaceutical and biotech sectors.

We accompany you with personalized, flexible and comprehensive solutions in the development of your project, without intermediaries.

We specialize in carrying out processes and cleanroom projects working out the phases of **conception, design, execution & validation** to offer a holistic solution to our clients, considering the objectives of regulations, time to market, quality and costs.

We are Airplan.



**EXPERIENCE
& KNOW-HOW**

Since 1968, more than 3,000 projects carried out, in 50 countries on 5 continents.



**REGULATORY
COMPLIANCE**

We understand the sector's regulatory requirements and translate those into concrete solutions.



**FLEXIBILITY
& ADAPTABILITY**

Your project as it should be: personalized.

We look for flexible, simple solutions adapted to your needs.



**PARTNERS
FOR LIFE**

80% of our projects come from recurring clients.

We establish lasting relationships based on quality, commitment and responsibility.



**CLEANROOM
INFRASTRUCTURES**



**PROCESS
TECHNOLOGY**

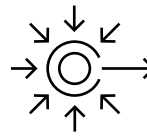


**STERILE AIR
SOLUTIONS**



**PROJECT
INTEGRATION**

We integrate solutions that cover all phases and needs of a project's life-cycle, thus offering a global solution.



**EXTENSIVE
NETWORK**

We aim to offer the highest quality at the best price, which is why we have an extensive supplier network worldwide. Under Airplan's responsibility.



**RESULTS
& GROWTH**

We exceed your expectations. Demonstrable results of our solutions boost the success of your business.



**GLOBAL
YET LOCAL**

We design your project with international projection, but we carry it out with local resources.

**Working with
AIRPLAN**
from the initial
consulting to the
delivery of
your project



With us you are in good hands

Airplan makes more than 100 technicians and engineers available to your project, each of them specialized in a different discipline required for the correct execution of a **turnkey project** for the Life Science sector.



We centralize the management of your project

With Airplan, contracting a comprehensive project means having a single contact partner, who organizes all participants to guarantee agility, understanding of detail and quality.
We develop and manage each project 100%, without diluting responsibilities, and being totally transparent with the client.

Discover how we work
each phase of your future project.

PHASE 01

**Consulting
& Concept**

We conceptualize the best technical and economic solution based on your needs and adapted to current regulations.

PHASE 02

**Design &
Engineering**

Development of basic and detailed engineering as key tools that lead to the success of your project.

PHASE 03

**Project
Execution**

Process and sterile air equipment manufacturing. On-site installation, and commissioning of infrastructures and equipment.

PHASE 04

**Validation &
Documentation**

We ensure regulatory compliance and deliver exhaustive documentation, appropriate for validation.

Our solutions are organized into **three key technology areas**

You decide how far we go together

Discover our solutions and products, grouped into three main families. We tailor our involvement to match the needs of your project.



CLEANROOM INFRASTRUCTURES



AIR TREATMENT

- > HVAC
- > Centralized dust extraction
- > Fume and gas extraction in critical environments
- > BIBO containment systems (Bag-In/Bag-Out)

CLEANROOMS

- > Modular construction systems (panels, doors, windows, integrated lighting, walkable ceilings, flooring, accessories...)
- > Stainless steel furniture
- > Laboratory furniture

UTILITIES

- > Black Utilities (Industrial and critical support services)
 - Hot/cold water, cooling and heating energy, electrical power, domestic water, industrial steam, technical gases, fire protection
- > Pure Media (Water treatment) – Purified Water (PW), Water for Injection (WFI), and Pure Steam

PROCESS TECHNOLOGY



PHARMACEUTICAL PROCESSES

- > Preparation and formulation
- > Mixing and homogenization
- > Buffer and solution preparation

BIOTECH PROCESSES

- > Bioreactors / Fermenters
- > Clarification equipment
- > Controlled thawing of raw materials
- > Purification equipment

HANDLING

- > Dosing
- > Loading and unloading
- > Product transfer
- > Sterile filtration
- > Auxiliary and storage tanks

CLEANING & STERILIZATION

- > WIP / CIP / COP cleaning systems
- > SIP sterilization

STERILE AIR SOLUTIONS



UNIDIRECTIONAL AIRFLOW EQUIPMENT AND SOLUTIONS

- THE**AIRBOOTH** - Weighing and sampling booths
- THE**AIRBOX** - Pass-throughs
- THE**AIRFFU** - Fan Filter Units
- THE**AIRUDAF** - Unidirectional airflow modules, areas, and rooms
- THE**AIRCART** - Transport cart for transporting sterile containers or products
- THE**AIRRABS** - Restricted Access Barrier Systems (RABS)
- THE**AIRBELT** - Ventilated tunnel for sterile container transfer
- THE**AIRCHAMBER** - Vial and ampoule cooling chamber

Regulatory Affairs

Regulatory Compliance Consulting

Our Regulatory Affairs team, embedded within the Engineering Department, ensures that every project complies with current regulations — including GMP guidelines (Good Manufacturing Practices) from the EMA, FDA, as well as relevant national standards and pharmacopoeias depending on the project.



We support our clients from the early pharmaceutical plant design stages through to the integration of regulatory requirements into engineering solutions, acting as a technical reference to ensure each facility meets the highest standards of quality and safety. We also provide assistance during regulatory audits and inspections.

From Vision to Reality



Smart Engineering for the Life Sciences Industry

At Airplan, we don't just design — we engineer with purpose. Our approach turns your ideas into practical, efficient and fully compliant solutions, tailored to the demanding needs of the pharmaceutical and biotech sectors.

From early feasibility to detailed design, we guide every step of the project with a global outlook, deep technical expertise and a clear focus on results. Sustainability, regulatory alignment and operational excellence are built into everything we do.

Feasibility and Conceptual Engineering

Laying the Groundwork for Every Project

Every successful facility starts with the right foundation. At Airplan, we combine technical insight and regulatory know-how to help you define the most efficient, cost-effective and compliant path forward. Feasibility studies allow us to compare alternatives, assess viability and support sound decision-making — before investing in engineering.

Based on the selected approach, we develop an initial technical design, define key systems, and estimate scope and costs. Design criteria are validated according to your product, available space and applicable regulations.

From day one, our engineering and process experts work hand in hand to ensure your infrastructure is aligned with real production needs.

We adapt our solutions to brownfield and greenfield sites, as well as to upgrades of existing facilities.

Basic and Detailed Engineering

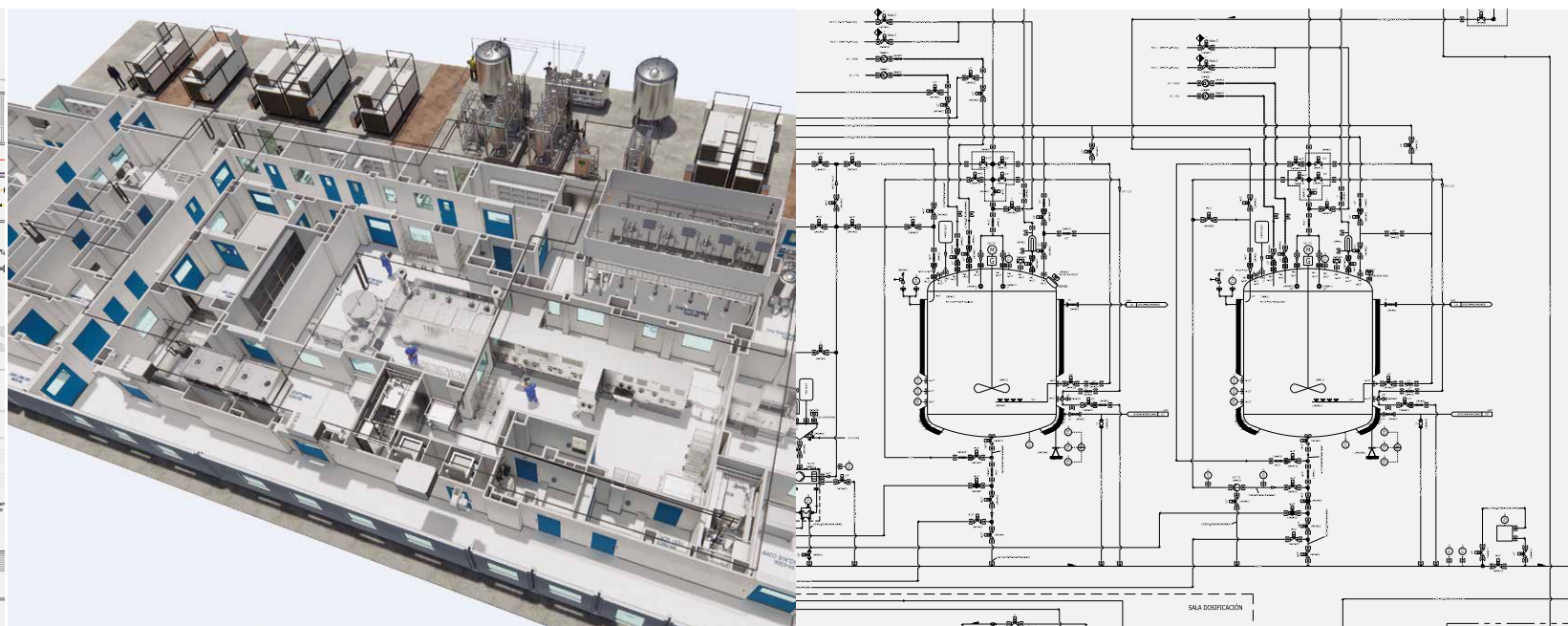
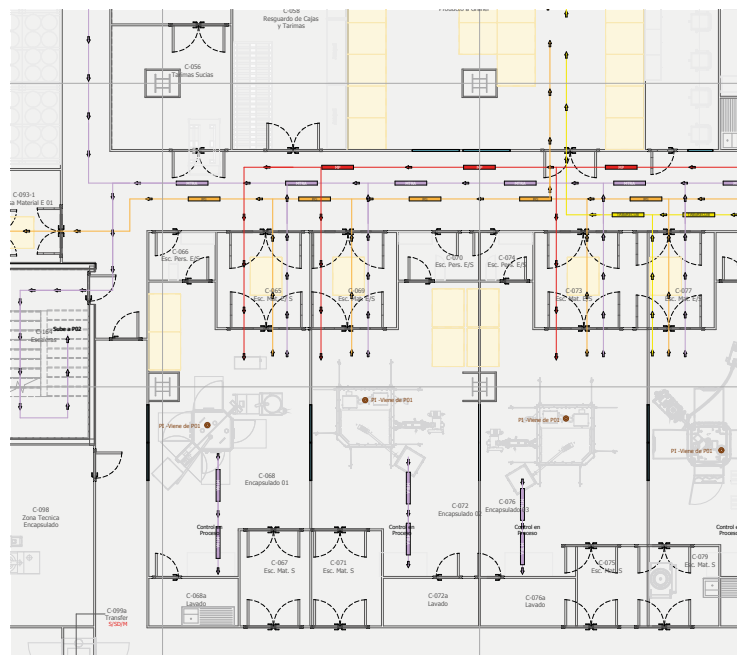
Turning Layouts into Performance.

At Airplan, we speak your process. Our engineering teams translate concepts into precise layouts and structured workflows that lay the groundwork for flawless execution. From fabrication to validation, every stage is planned for efficiency, compliance and control — keeping your project on time and on budget.

We use advanced design tools tailored to each discipline:

- For infrastructure, we rely on BIM platforms — especially AUTODESK REVIT — to model buildings, cleanrooms and integrate equipment, piping and utilities with total precision.
- For process design, we use Autodesk P&ID for functional layouts and Solid Edge (3D CAD) for detailed mechanical design.

At Airplan, we design and execute. With full control over detailed engineering, we guarantee a seamless, efficient and fully traceable execution.



Comprehensive Cleanroom Infrastructure Solutions



Every Client Is Unique — and So Are Our Solutions

When you choose Airplan for your turnkey infrastructure project, you get a single, trusted partner from start to finish. We manage the entire process in-house — with full control, clear accountability, and guaranteed results. No middlemen. No uncertainty.



From Enclosures to HVAC: **Everything Your Cleanroom Needs**

We work side by side with our clients to turn layouts into productive, competitive facilities. From day one, we ensure full regulatory compliance and help define the right level of technology for each project.

Every production site comes with its own set of challenges — which is why every infrastructure must be purpose-built.

Our engineering team studies your production flows and critical points to design a facility that's smart, functional and optimized for both investment and long-term performance.

Pure Media / Black Utilities



Our cleanroom infrastructure solutions cover **GMP modular construction systems, HVAC systems, sterile areas, Black Utilities and Pure Media.**

Compressed Air



HVAC Systems

Sustainability and Energy Efficiency

At Airplan, we see energy efficiency as a core pillar in the design and operation of pharmaceutical facilities. It's not just about lowering operating costs — it's also about meeting today's demanding environmental standards.

Our approach combines smart design, efficient system integration and advanced technologies to ensure robust, reliable and sustainable performance.

HVAC Systems and Technical Areas



Process Solutions for **Oral Liquids, Topical Creams and Sterile Products**



Solutions Made by AIRPLAN

To develop a successful and robust pharmaceutical production line, it takes more than just the right equipment — it requires expertise in engineering, compliance and the process itself.

At Airplan, we combine all three to deliver complete, integrated solutions that work.



We help you define the **ideal setup** for your **production plant**

For complex processes like HPAPI, we offer high-containment solutions designed for maximum safety and compliance.

In biotech, we develop full production lines for **vaccines, biosimilars or plasma fractionation** — covering every stage from upstream and downstream to formulation, cleaning and sterilization.

We design and manufacture key equipment — including bioreactors, production vessels and CIP/SIP systems — fully integrated with your cleanroom and utility infrastructure.

Whatever type of drug you're planning to manufacture, let's talk about how we can support your next production facility.

We adapt to a wide range of pharmaceutical dosage forms — **from sterile injectables and ophthalmic drops to syrups, softgels, creams, lotions and ointments.**

Our team supports you in selecting the right vessel sizes, mixing systems, filtration systems and CIP/SIP solutions tailored to your product and process.

Reactor for hyaluronic acid production with corresponding buffer



End-to-end solutions
across every stage of the
biological process:
upstream and downstream

Automated production line for formulation



Bioreactors for second and third fermentation phases in a vaccine process



Bioreactors for initial fermentation phase in a vaccine process



Production line for topical cream



CIP Cleaning System



**We design
and integrate
technology**
for every step
of production

Vaccine production – downstream phase of the process



Sterile Air Solutions



Industrial Air Handling for Sterile Environments is in Our DNA

With over 55 years of experience, we design air handling solutions for cleanrooms with unidirectional airflow — a key element in our turnkey projects.

We design and manufacture equipment, targeted zones or entire Grade A / ISO 5 classified areas, fully compliant with current regulations for sterile production.

Air System Engineering for **Critical and Sterile Environments**

We like a challenge

Facing a sterility issue with no clear solution? Even if it doesn't exist yet — or isn't in this catalog — we'll help you find the right one.

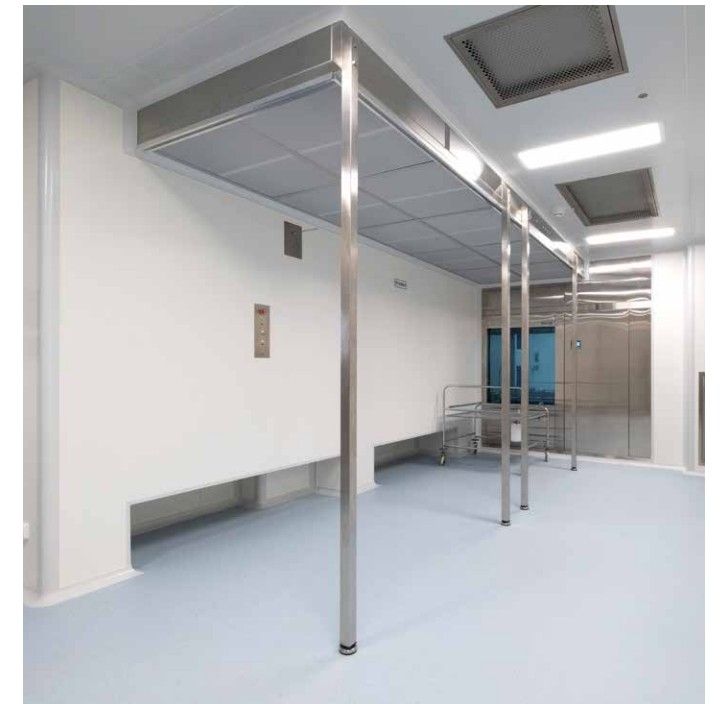
By combining our engineering expertise with in-house manufacturing, we deliver custom, cost-effective solutions.

Designs for Special Requirements

We develop systems and equipment tailored to specific situations, such as:

- Raw material handling in ATEX-classified zones
- Containment of high-risk products (bag-in/bag-out systems, localized extraction)
- Decontamination processes (H_2O_2 / UV light)

Unidirectional Airflow Area - THE AIR UDAF



Cart for transporting sterile products - THE AIR CART



Integrated pass-through systems - THE AIR BOX



Weighing and sampling booths - THE AIR BOOTH



Unidirectional Airflow Room - THE AIR UDAF



How can we help
you **bring your
next Life Science
project to life?**

AIRPLAN - HEADQUARTERS

C. Vallcebre 13 - 19
08272 Sant Fruitós de Bages
Barcelona
Spain
Tel. +34 938 788 384
info@airplan-sa.com

**Subsidiaries in Portugal, EEUU, Mexico,
Colombia, Venezuela, Chile
and the Dominican Republic.**

marketing@airplan-sa.com

EN INT 2025-09

