

PROACTIVE SOLUTIONS IN MODULAR ARCHITECTURE

AERONAUTICAL SOLUTIONS



GOPTEK

Gaptek was founded over 12 years ago with the aim of creating an innovative and disruptive system in the construction of buildings, offering a versatile product with the ability to create countless solutions in different sectors.

As a global company, it is vital to understand the dynamics of the market and each client's needs. This has allowed us to expand our portfolio of solutions, adapting to the circumstances of each time.

We maintain a leadership position in the Aeronautical sector thanks to our continuous improvement in the company's products, services and processes.

We focus on generating a competitive advantage to maintain a long-term sustainable growth. Our commitments to the sustainable development goals are evident in the system we have developed, using recyclable and environmentally friendly materials.

Gaptek's team is the main asset of the company, allowing our constant growth and progress. The fusion of talent and a multicultural approach are instrumental to our success.

Our mission as a company goes beyond business growth: we intend to contribute positively to the industrial and construction sectors, to the society and to the world we live in.

Tomas Feliu, President of Gaptek



At Gaptek we design, manufacture and build sustainable and energy efficient buildings based on our construction system.

The Gaptek system is tailored to the needs of each project, with proven advantages over traditional construction methods.

We operate worldwide, providing feasibility to a diverse nature of clients and any project needs.

Our main business focus is the Aeronautical Industry, where our system has a wide range of application to the constantly evolving sector dynamics.



CREATED TO BUILD WITHOUT LIMITS

Technologies and our own construction system

Gaptek intelligently applies existing construction elements and technologies.

Applied to our methodology, this allows us to always have a total control over the three fundamental parameters of the project: time, quality and cost.

The structures of Gaptek buildings are mainly made of pre engineer constructive elements assembled by mechanical joints.

The lightness, durability and sustainability of our structures make it possible to reduce construction time, maintenance costs and logistical needs, increasing the value of the project.



OUR SOLUTIONS

Hangars

MROs

FBOs

Cargo Terminals

Aircraft Paint Facilities

Warehouses

Shelters

Offices

FULLY CUSTOMIZED AERONAUTICAL BUILDINGS THROUGH AN INDUSTRIAL TURNKEY SOLUTION

- Passenger Terminals



Maintenance Hangars for the A400M Location: Zaragoza (Spain) Surface: 54,250 ft² / 5.040 m² Execution time: 22 weeks







A400M Engine workshops Location: Zaragoza (Spain) Surface: 47,253 ft² / 4.390 m² Execution time: 18 weeks


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A400M Engine workshops Location: Zaragoza (Spain) Surface: 47,253 ft² / 4.390 m² Execution time: 18 weeks







Cold Air Cargo Terminal Warehouse and Offices Location: Spain Built-up area: 36,123 ft² / 3.356 m² Execution time: 23 weeks



















Hangar for MRTT A330 with offices Location: Sevilla (Spain) Surface: 60,546 ft² / 5.625 m² Execution time: 24 weeks

UAV Reaper Hangar Location: Talavera la Real (Spain) Surface: 11,151 ft² / 1.036 m² Execution time: 5 weeks



Premium Aerospace Center Hangar Extension Location: Oklahoma (USA) Surface: 19,687 ft² / 1.829 m² Execution time: 20 weeks





12:



Hangar Fokker Techniek Location: Hoogerheide (Netherlands) Surface: 64,583 ft² / 6.000 m² Execution time: 24 weeks









Multi-bay wide-body hangar a A380-800 + 4 A321XLRs Location: Confidential Surface: 131,300 ft² / 12.200 m² Under going Construction







Multi-bay wide-body hangar 2 A380-800s + Workshops & Offices Location: Dubai, Middle East Surface: 163,600 ft² / 15.200 m² Under development







SHELLIPORT

- Aircraft protection from aggressive weather events
- Remote control opening and closing in less than 3 minutes
- No obstacle infrigment, folding completely when helipad in operation
- Electromagnetic / navaids permeability of the shell
- Fully customizable to client requirements (civil or military use)
- \cdot Easy transportation and installation on-site to both exsisting / new helipads







Facilities includes in to the project: Technical Control Room, Departure's Hall, Baggae Check-in, Departure's Security Control, Boarding-Arrival Hall, Arrival Passport Control, Baggage Collection, Arrival's Secutiry Control, Arriva's Hall.

Airport Terminal Model Surface: 221,413 ft² / 20.570 m² in 2 floors



OUR STRUCTURES

The Gaptek's construction system is applied in all types of buildings: structures with large arched spans for hangars and warehouses, or modular structures with several floors for homes, offices, hospitals, etc.

Gaptek's construction system can also be easily adapted for special structures like large covers, airport terminals, etc.





























The structures are composed of structural aluminium profiles with mechanical joints.

This mechanical joint system allows to reduce construction times respecting the previously established cost of the work.



HIGH QUALITY TECHNOLOGY AND PROJECT CUSTOMIZATION

The Gaptek system, developed by our Engineering and Architecture departments, is based on the design of highquality structural profiles.

The structural aluminium we use makes our buildings compliant with technical building codes, equating our buildings to those of traditional construction, with the added benefits of modularity.

The design we use allows us to use agile logistics adapted to reach places that are difficult to access. They also allow us to realize buildings with large spans, through easy mechanical assembly that speeds up construction times, without the need for heavy machinery.

The technological characteristics of the Gaptek system allows you to customize the design of your projects.





We incorporate R&D+i in product development and with the use of design tools, structural calculation programs and 3D printing we study and carry our increasingly advanced buildings.

GAPTEK AND THE ENVIRONMENT

"The EU aims to be climate-neutral by 2050 – an economy with net-zero greenhouse gas emissions. This objective is at the heart of the European Green Deal and in line with the EU's commitment to global climate action under the Paris Agreement.

The transition to a climate-neutral society is both an urgent challenge and an opportunity to build a better future for all.

All parts of society and economic sectors will play a role – from the power sector to industry, mobility, buildings." *

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(*) https://ec.europa.eu/clima/policies/strategies/2050_en



CIRCULAR ECONOMY

Since its inception Gaptek has adopted measures in favour of the circular economy in its projects. Today this allows us to continue moving towards a more CO₂ neutral economy, and comply with the parameters and new environmental laws indicated by the EU.

The solutions proposed by Gaptek have a low environmental impact from the manufacture and logistics to the construction.









PRODUCTION WITH RAW MATERIAL FROM RENEWABLE SOURCES

DESIGN & MANUFACTURE OF ENVIRONMENT FRIENDLY BUILDINGS

LIFESPAN EXTENSION IMPROVE OF THE MAINTENANCE AND EFFICIENCY OF THE BUILDING



SUSTAINABILITY

External consultants' studies commissioned by Gaptek have shown that the CO_2 emissions of our strutures are up to 28% lower that those of a steel frame building.

The Gaptek's system also makes it possible to highly reduce construction waste due to our predesign phase and building method.

Structural aluminium is a 100% infinite material that can be fully recycled without losing quality or physical properties.



PERFORMANCES OF THE BUILDING AND ECONOMIC SAVING

Passive system and energy efficiency

We condition the building using passive systems, typical of sustainable architecture, such as climate control, geothermal, solar and wind technologies. Thanks to an air circulation system between the finishes, the temperature is regulated in any type of environment. The elimination of thermal bridges through our insulating solutions represents great energy savings and optimal performance of the building in both hot and cold climates, thus reducing the cost of air conditioning.

Antarctica Warehouse at the Scientific Base Location: Antarctica



THE GAPTEK SYSTEM

SHORT ASSEMBLY TIME

All constructive elements are assembled through clicking and/or screwing methods, simplifying the construction process.

LOW MAINTENANCE COSTS

Minimum maintenance requirements thanks to the aluminium structure, even in aggressive environments.

SUSTAINABILITY

Lower carbon footprint compared to traditional steel structures, reduced construction waste and increased recyclability in favor of the circular economy.

ENERGY EFFICIENCY

Passive systems incorporated for reduced operating costs, with the possibility to achieve green building certifications if required.

SCALABLE AND ADAPTABLE

Entirely customisable and expandable solutions due to the use of the flexible architecture principle.

REVERSIBLE AND RELOCATABLE

Easily demounted solutions, can be transported to new locations or repurposed on-site.

PREDEFINED QUALITY

All design and constructive elements comply with international building codes, CE markings and can be easily adapted to local regulations.

CONTINUOUS INNOVATION

Efficiency in the design and construction process is ensured through the use of state-of-the-art digital tools and BIM principles.

TURNKEY SOLUTION

Simplicity in the product offer under a single commissioning covering the design, manufacturing, construction and maintenance.

METODOLOGY

CONSULTING	PROJECT DEVELOPMENT	MANUFACTURING	LOGISTICS	ASSEMBLY	AFTERSALES
Strategy definition	Summary and preparation	Material purchase	Packaging	Civil works	Project Management
Initial meeting	Concept design	Manufacturing	Shipping	Building assembly	24h Support
Information Exchange	Design development	Quality control	and transportation	MEP's installation	Maintenance
Project approval	Technical design			Delivery	





TECHNICAL CODES

Compliance with the International Building Code (IBC) and enabling organisations to comply with EASA/FAA Part-145 Certificate

Eurocode 3: Steel structures **Eurocode 9**: Aluminum structures

UNE EN1090-82/5000: European regulation on the design and manufacture of steel and aluminum structures UNE 1090-1:2009+A1:2011: Requirements for the conformity assessment of structural components UNE 1090-2:2019: Execution of steel and aluminum structures **UNE 1090-3:2019**: Execution of steel and aluminum structures

CE marking available on all materials

ISO 9001: 2015 in Quality Management ISO 14001: 2015 in Environmental Management ISO 27001: 2013 in Information Security Management ISO 45001: 2018 Occupational Health and Safety Management







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GAPTEK IS CURRENTLY PRESENT WORLDWIDE

