# PROACTIVE SOLUTIONS IN SUSTAINABLE MODULAR ARCHITECTURE





Gaptek was born more than 10 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 areas.

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 moment.

We maintain a leadership position in the sector thanks to continuous improvement in the company's products, services and processes. We focus on generating a competitive advantage to maintain 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.

The people who make Gaptek represent the main asset of the company, allowing constant growth and progress. The fusion of talent and a multicultural approach are the key to the success of the company.

Our mission as a company goes beyond business growth: we intent to contribute positively to the construction sector, society and the world in which we live.

omas Feliu, President of Gaptek





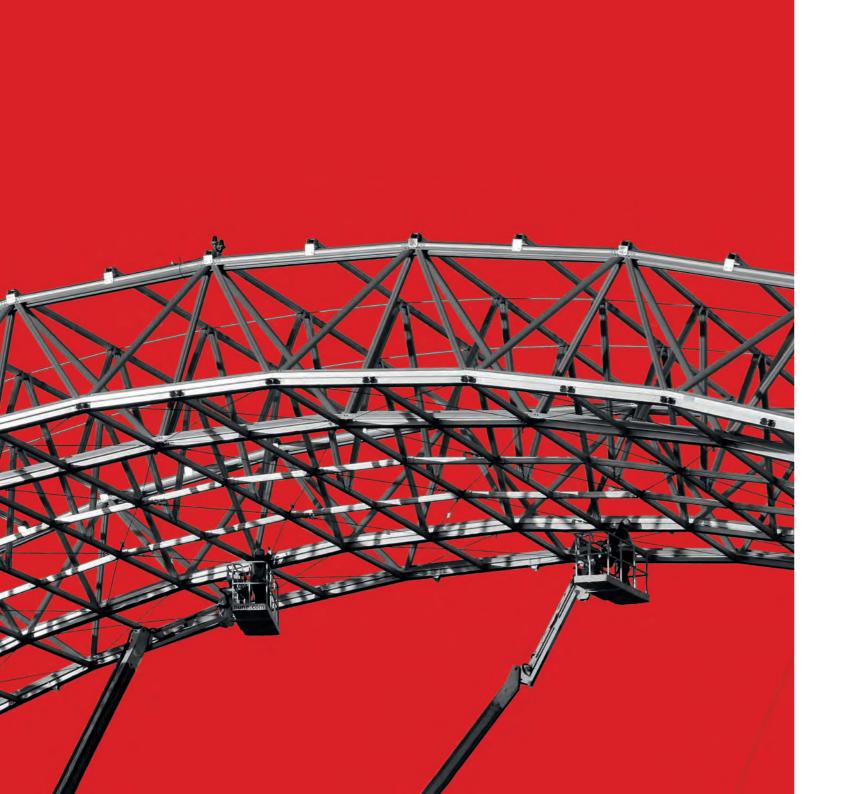
# CREATED TO BUILD WITHOUT LIMITS

### New technologies and our own construction system

The Gaptek system applies modular technology, which allows to always have a total control over the three fundamental parameters of the projects: time, quality and cost.

The structure of Gaptek buildings is mainly made of aluminium profiles assembled by mechanical joints.

The lightness, durability and sustainability of aluminium make it possible to reduce logistical needs, construction time and maintenance costs, increasing the quality of the product.



### **OUR SOLUTIONS**

HANGARS

WHAREHOUSES AND WORKSHOPS

LOGISTICS CENTERS

HOSPITALS AND LABORATORIES

SHELTERS

AIRPORT TERMINALS

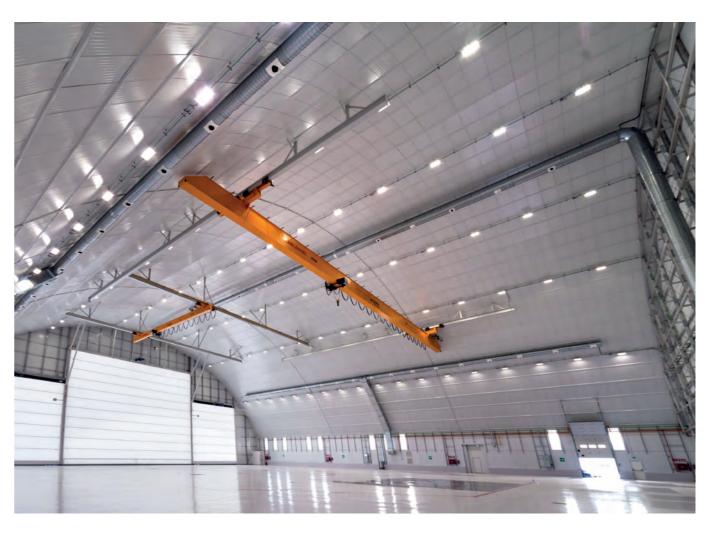
OFFICES

SPECIAL STRUCTURES



Maintenance Hangars for the A400M Location: Zaragoza (Spain) Surface: 5.040 m<sup>2</sup> Execution time: 22 weeks

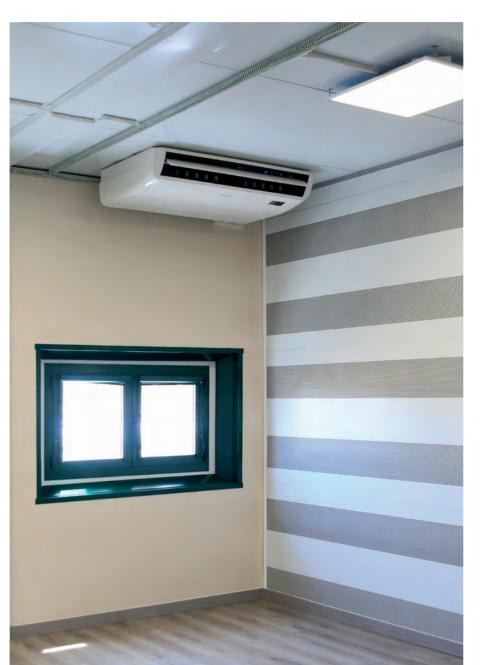






Modular Offices for Spanish Air Force Location: Morón (Spain) Surface: 795 m<sup>2</sup> Execution time: 16 weeks











A400M Engine workshops Location: Zaragoza (Spain) Surface: 4.390 m<sup>2</sup> Execution time: 18 weeks



Hangar for the A400M with offices Location: Sevilla (Spain) Surface: 5.040 m<sup>2</sup> Execution time: 20 weeks













Hangar for MRTT A330 with offices Location: Sevilla (Spain) Surface: 5.625 m<sup>2</sup> Execution time: 24 weeks

UAV Reaper Hangar Location: Talavera la Real (Spain) Surface: I.036 m² Execution time: 5 weeks

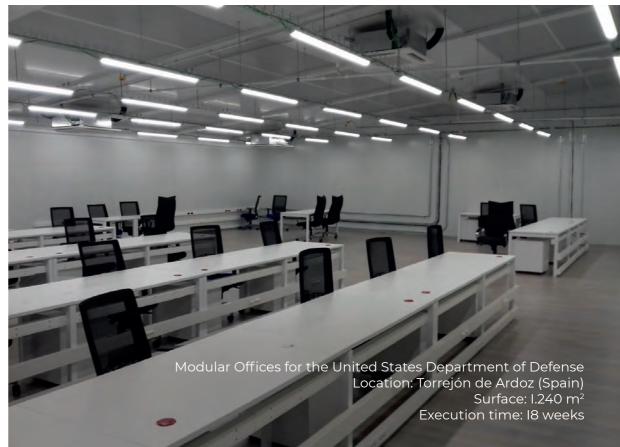
Modular Offices for the United States Department of Defense Location: Rota (Spain) Surface: I.240 m<sup>2</sup> Execution time: I8 weeks











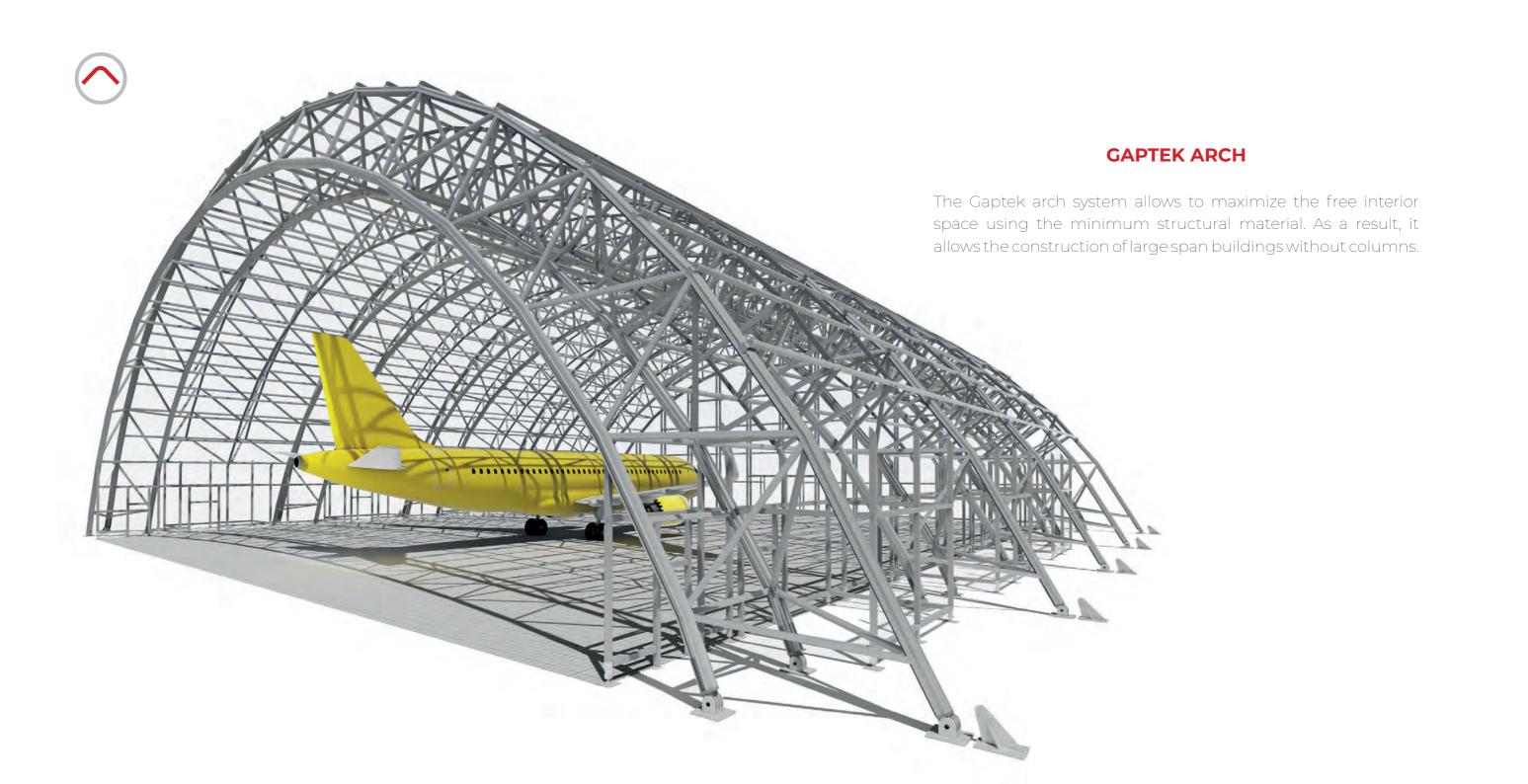


### **OUR STRUCTURES**

### GAPTEK ARCH GAPTEK FLAT GAPTEK MODULAR

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 as large covers, airport terminals, etc.

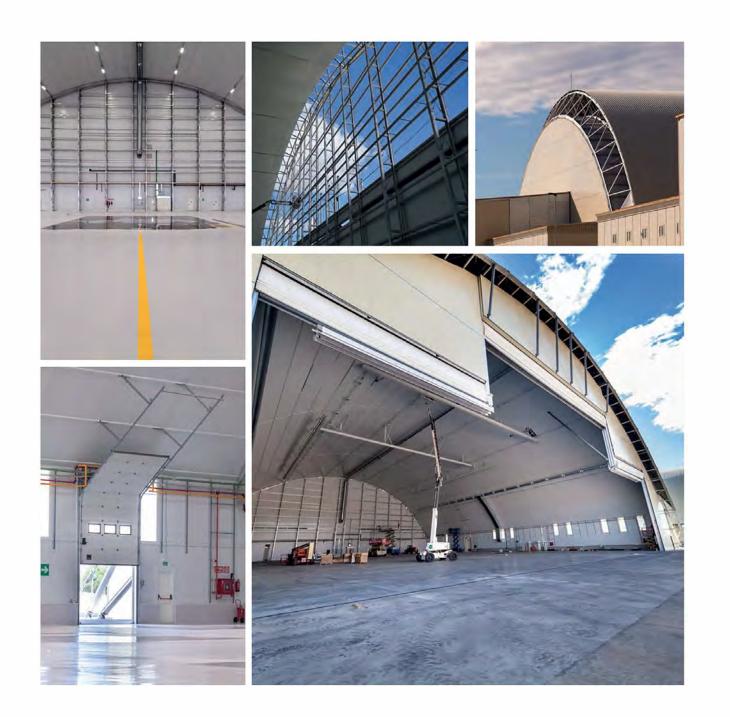


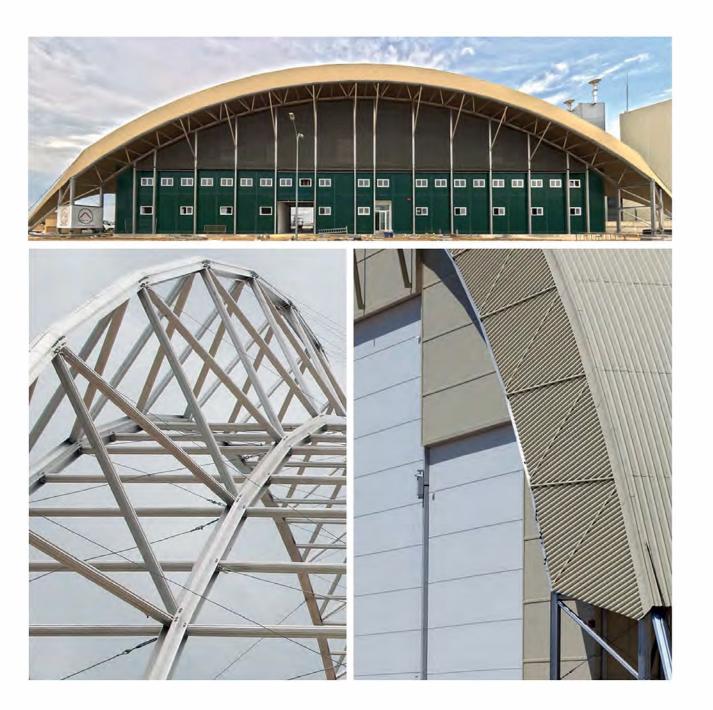




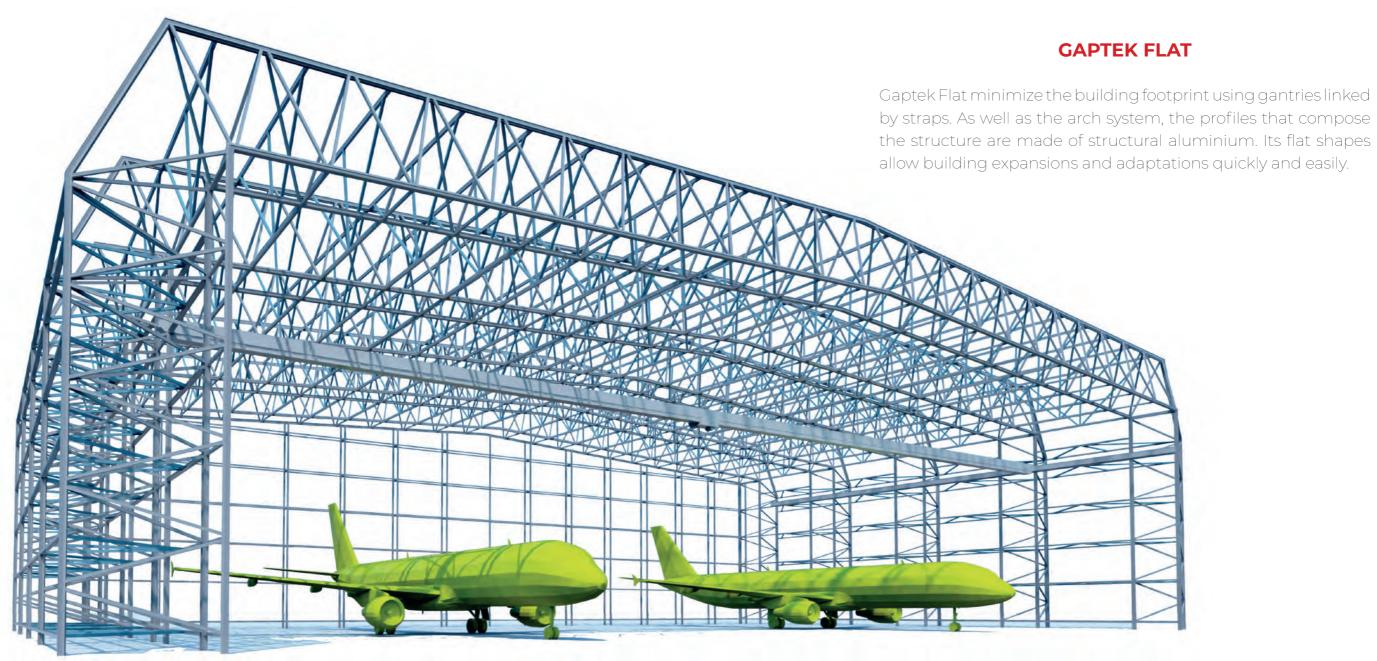


















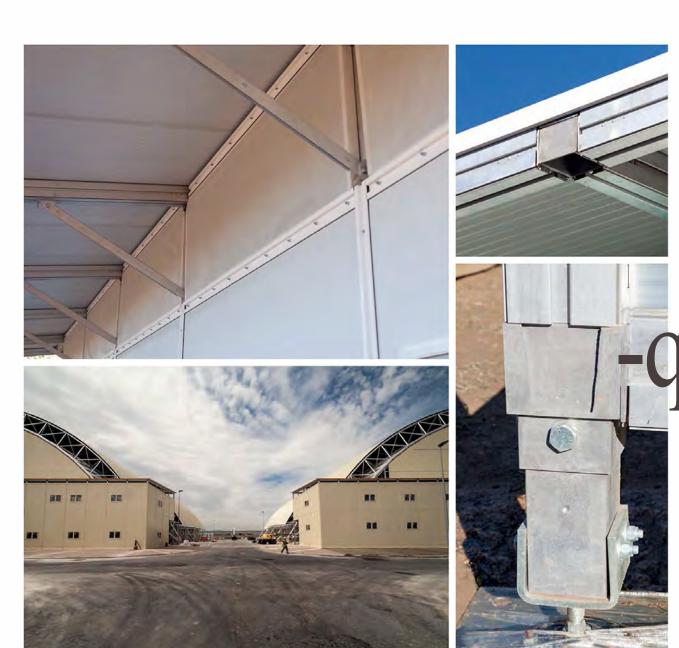
### **GAPTEK MODULAR**

The modules are designed for a directly installation after a minimal preparation of the ground. The modular system allows the rapid construction of buildings with one floor or more such as offices and hospitals.

Modules can be attached to an existing structure and building or can be used as a single or multiple units.











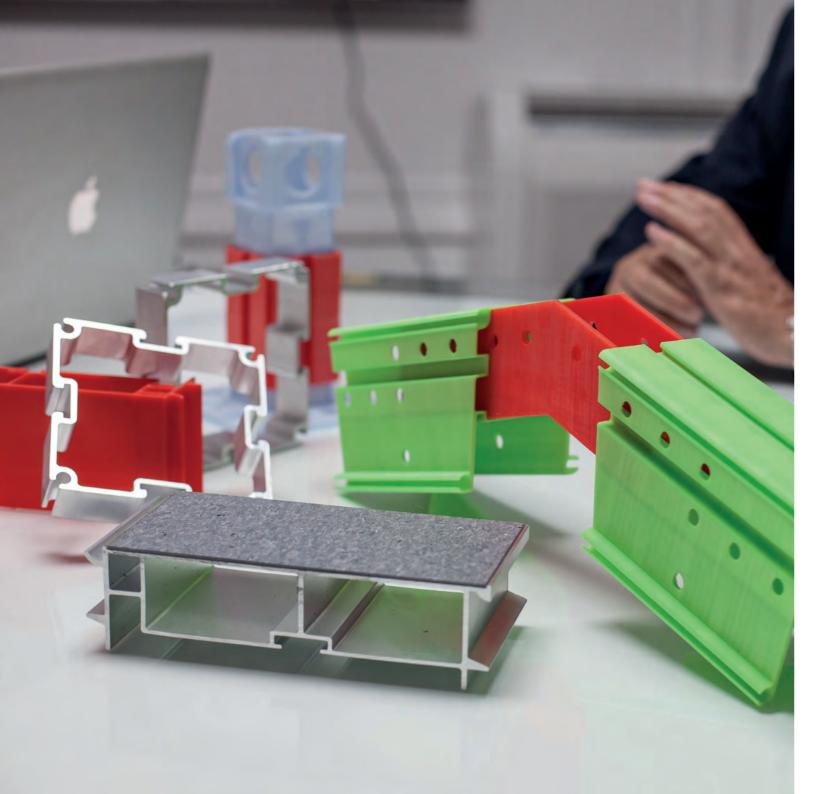








300 beds hospital Location: Niger Work in progress



## HIGH QUALITY TECHNOLOGY AND PROJECT CUSTOMIZATION

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

The structural aluminium we use makes our buildings comply 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 allow you to customize the design of your projects.



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.







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." \*

(\*) 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  $\mathrm{CO}_2$  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.

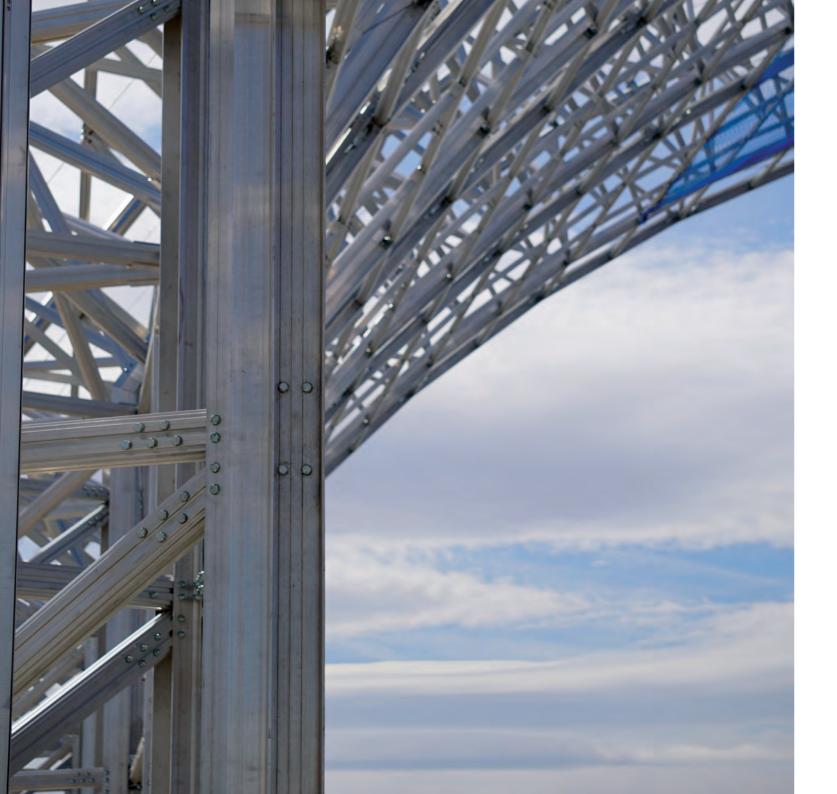


ZEROCONSULTING

GAPTER







### **SUSTAINABILITY**

External consultants' studies commissioned by Gaptek have shown that the  ${\rm CO_2}$  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.

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

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### **BENEFITS OF GAPTEK SYSTEM**

### **SUSTAINABLE**

The  $CO_2$  emissions of the structures of a Gaptek aluminium building are up to 28% lower that those of a steel building.

### SHORT CONSTRUCTION TIME

We pre-design and manufacture our buildings for a rapid assembly on site.

### **RELOCATION AND REUSE OF BUILDINGS**

The dynamism of Gaptek's architecture makes it easy to relocate our structures. It is the perfect balance between quality, resistance, and mobility.

### **LOW MAINTENACE COST**

Minimum maintenance of the structures, even in aggressive environments, thanks to the antioxidant properties of aluminium.

### **SCALABLE**

Buildings that are expandable and adaptable to your activity thanks to the use of modular structures.

### **METODOLOGY**

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





### **TECHNICAL CODES**

Compliance with the International Building Code (IBC)

**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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