PROACTIVE SOLUTIONS IN SUSTAINABLE MODULAR ARCHITECTURE

GAPTEK

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.

Tomas Feliu, President of Gaptek

GAPTEK

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

We even have managed to develop a state-of-the-art hangar project in six months as a scientific module in Antarctica.

We merge architecture, engineering, production, and logistics within a system that allows us to develop a much more advanced technology compared to traditional construction systems.

Our system is designed to operate worldwide, providing feasibility to any existing need.

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

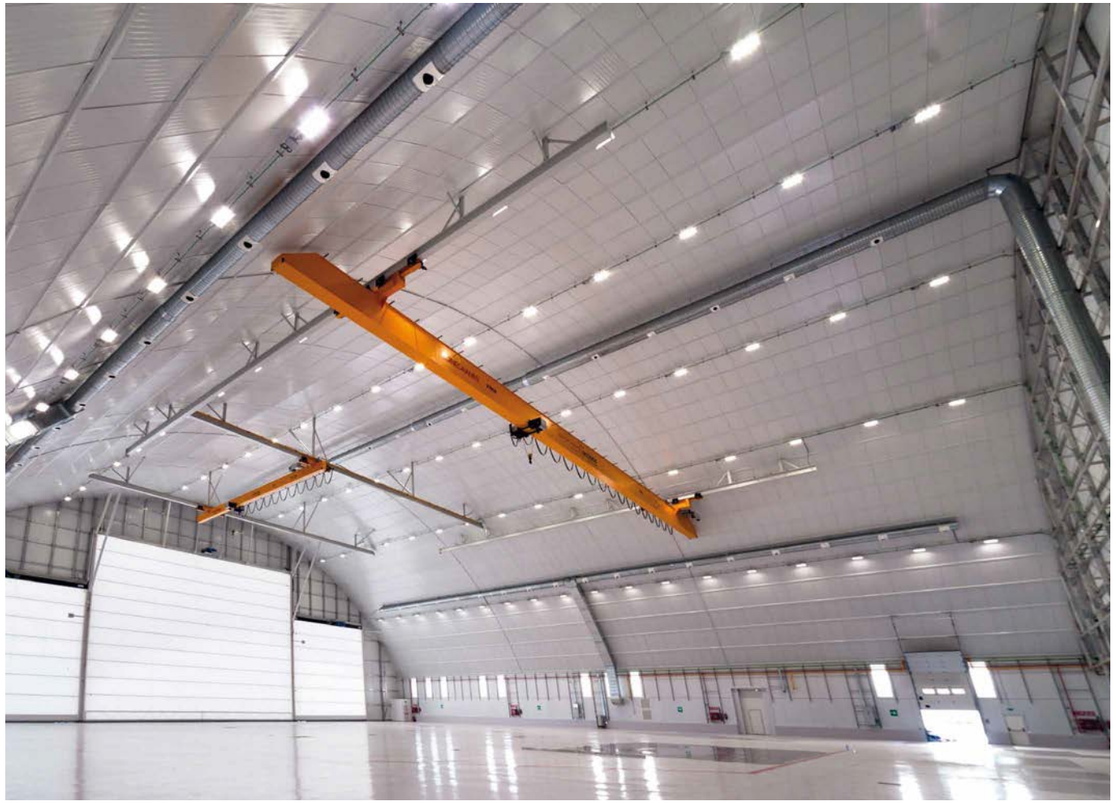
SHELTERS

AIRPORT TERMINALS

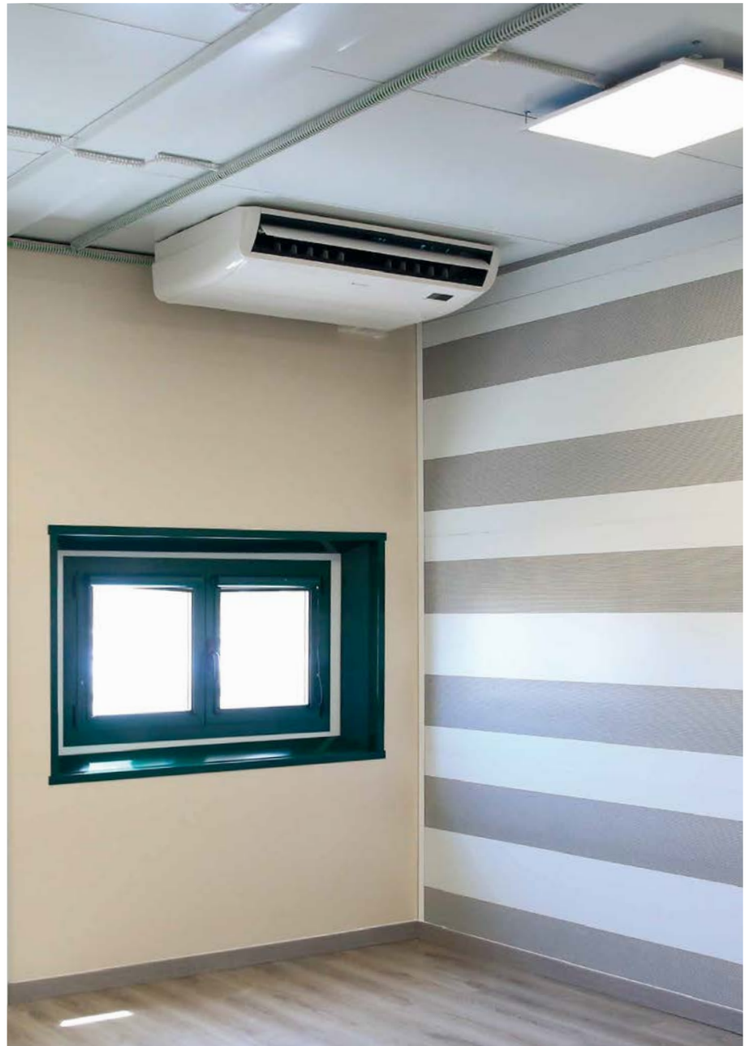
OFFICES

SPECIAL STRUCTURES

Maintenance Hangars for the A400M
Location: Zaragoza (Spain)
Surface: 5.040 m^2
Execution time: 22 weeks



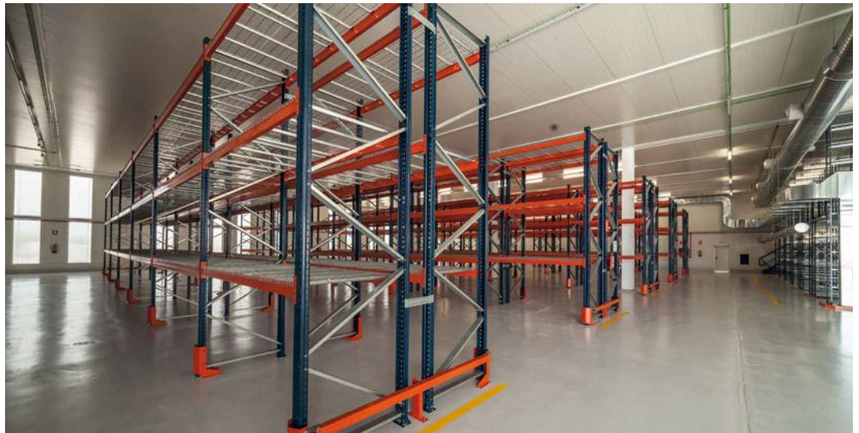
Modular Offices for Spanish Air Force
Location: Morón (Spain)
Surface: 795 m²
Execution time: 16 weeks



A400M Engine workshops
Location: Zaragoza (Spain)
Surface: 4.390 m^2
Execution time: 18 weeks

A400M Engine workshops
Location: Zaragoza (Spain)
Surface: 4.390 m^2
Execution time: 18 weeks

MRO Warehouse
Location: Zaragoza (Spain)
Surface: 2.700 m²
Execution time: 16 weeks

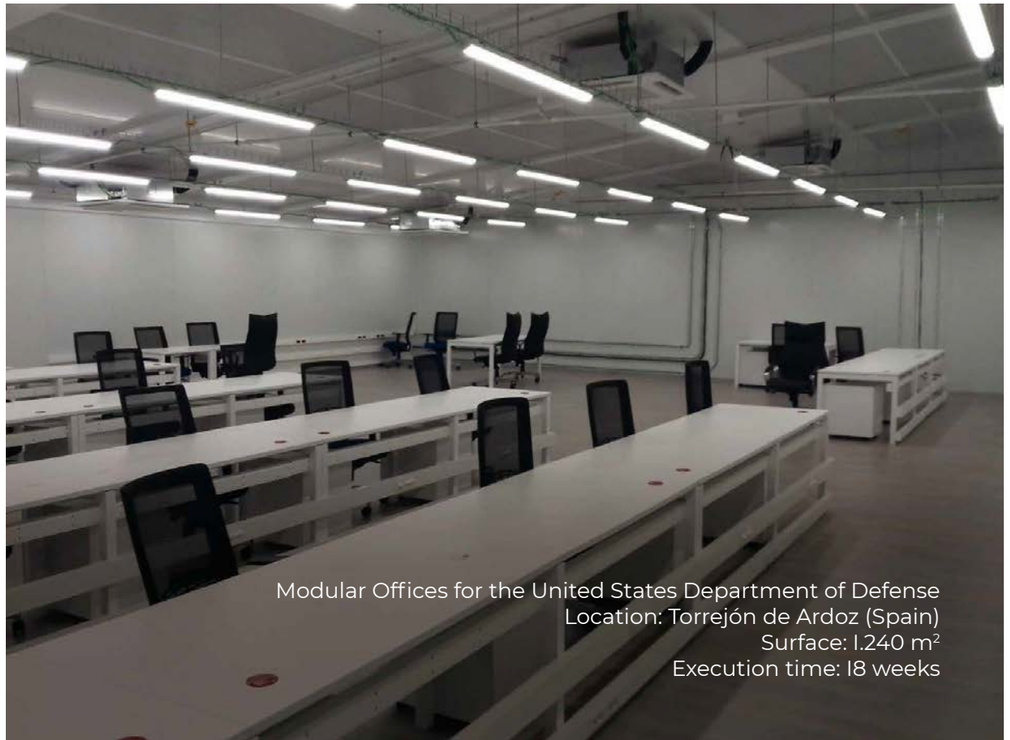


Hangar for the A400M with offices
Location: Sevilla (Spain)
Surface: 5.040 m²
Execution time: 20 weeks

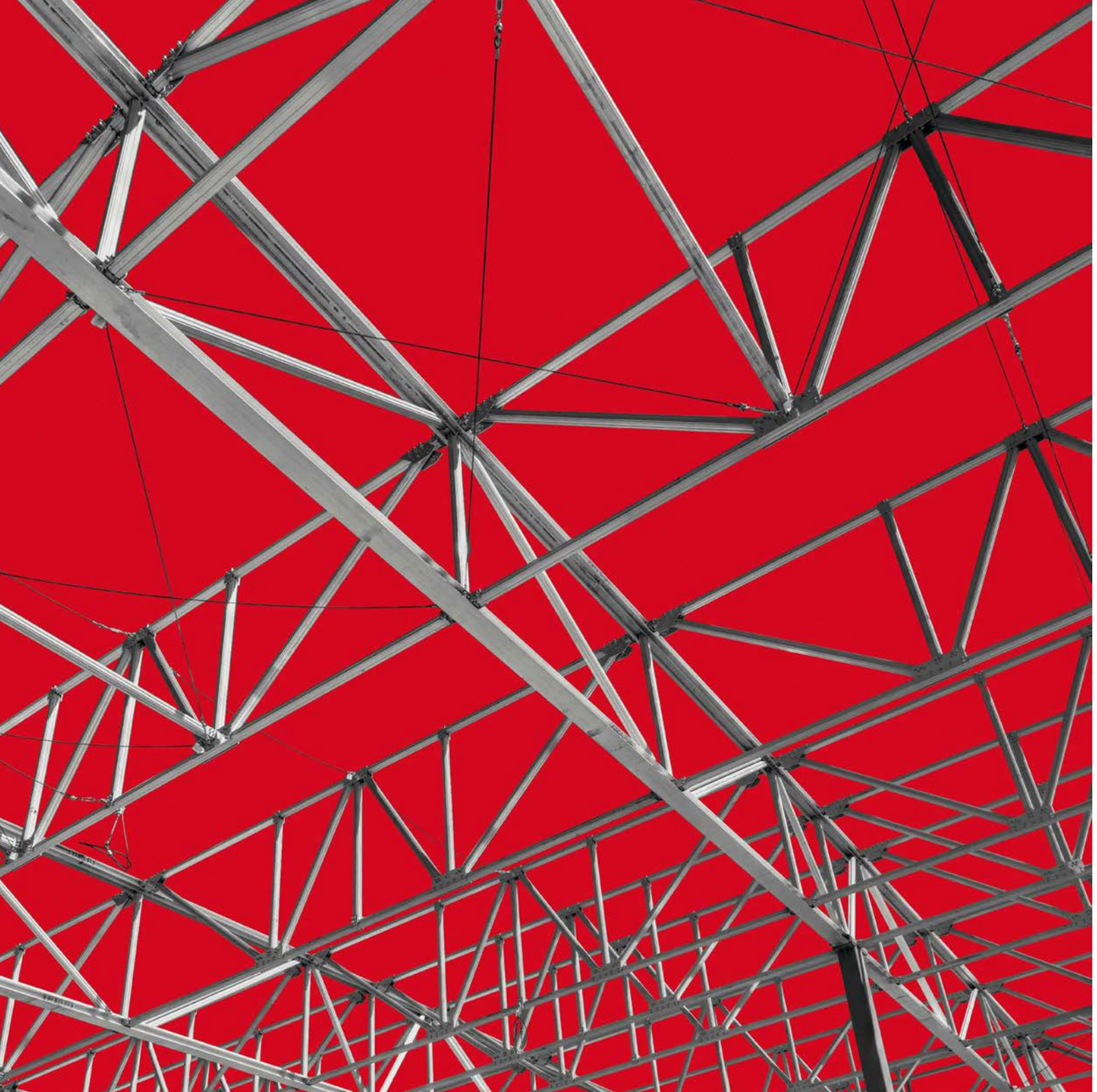
Hangar for MRTT A330 with offices
Location: Sevilla (Spain)
Surface: 5.625 m²
Execution time: 24 weeks

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

Modular Offices for the United States Department of Defense
Location: Rota (Spain)
Surface: 1.240 m^2
Execution time: 18 weeks



Modular Offices for the United States Department of Defense
Location: Torrejón de Ardoz (Spain)
Surface: 1.240 m²
Execution time: 18 weeks

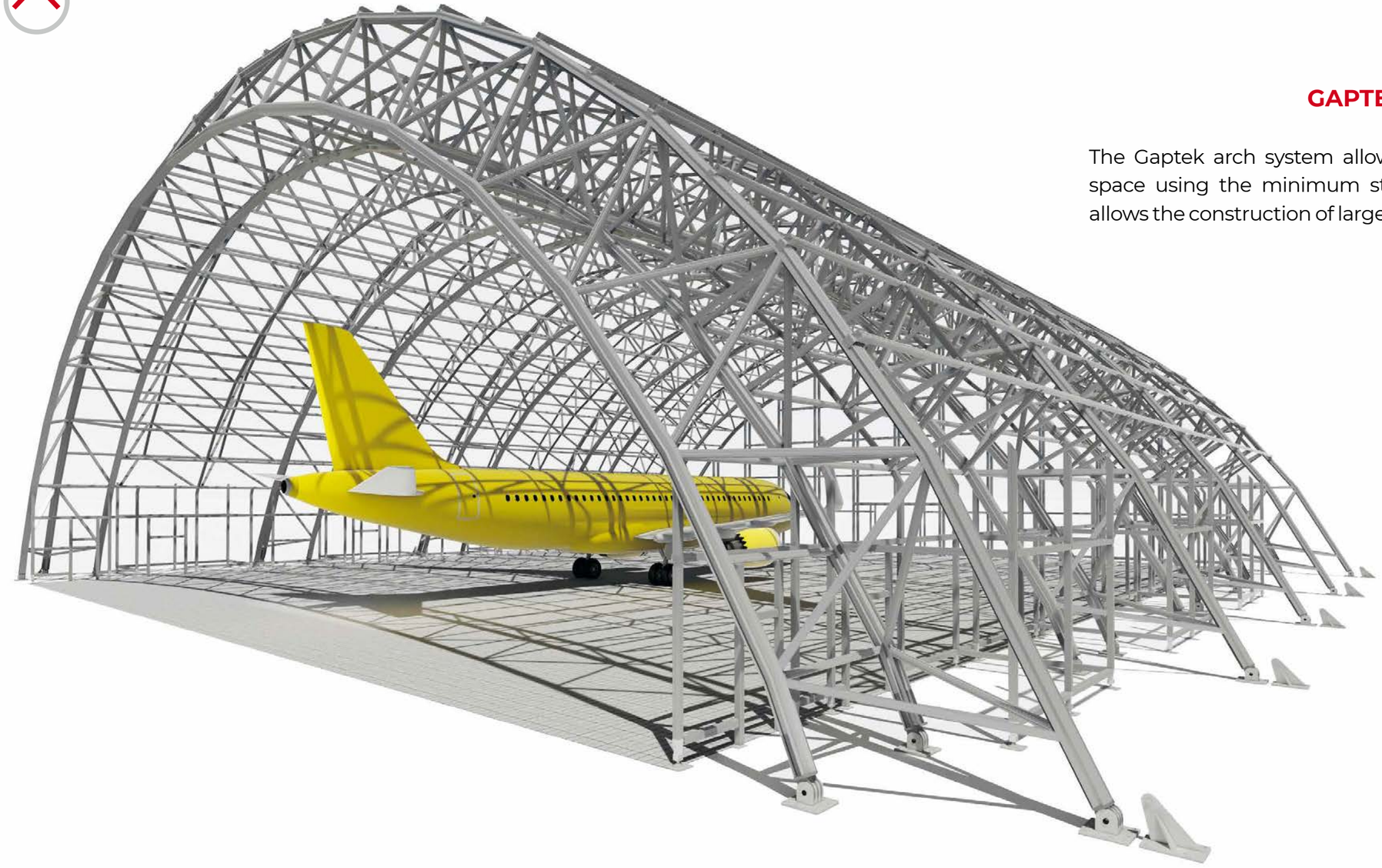


OUR STRUCTURES

GAPTEK **ARCH** GAPTEK **FLAT** GAPTEK **MODULAR**

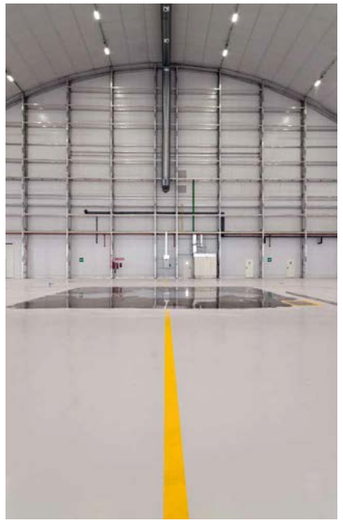
The Gaptek's construction system is applied in all types of buildings: structures with large arched spans for hangars and warehouses, or modular structures with several floors for homes, offices, hospitals, etc.

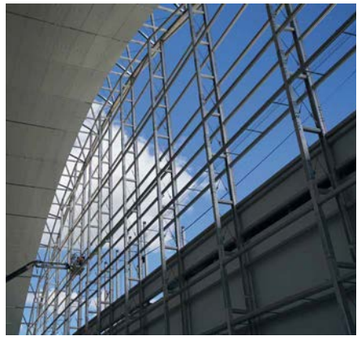
Gaptek's construction system can also be easily adapted for special structures as large covers, airport terminals, etc.

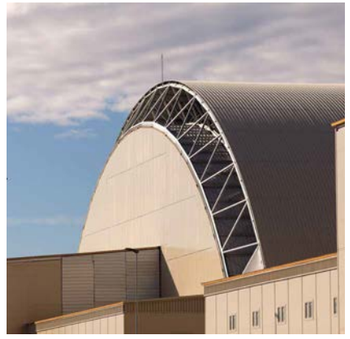


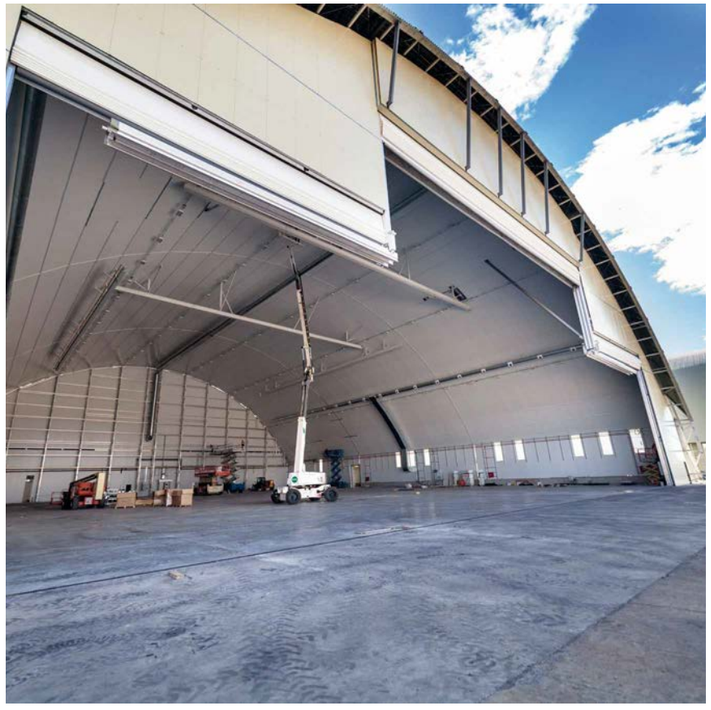
GAPTEK ARCH

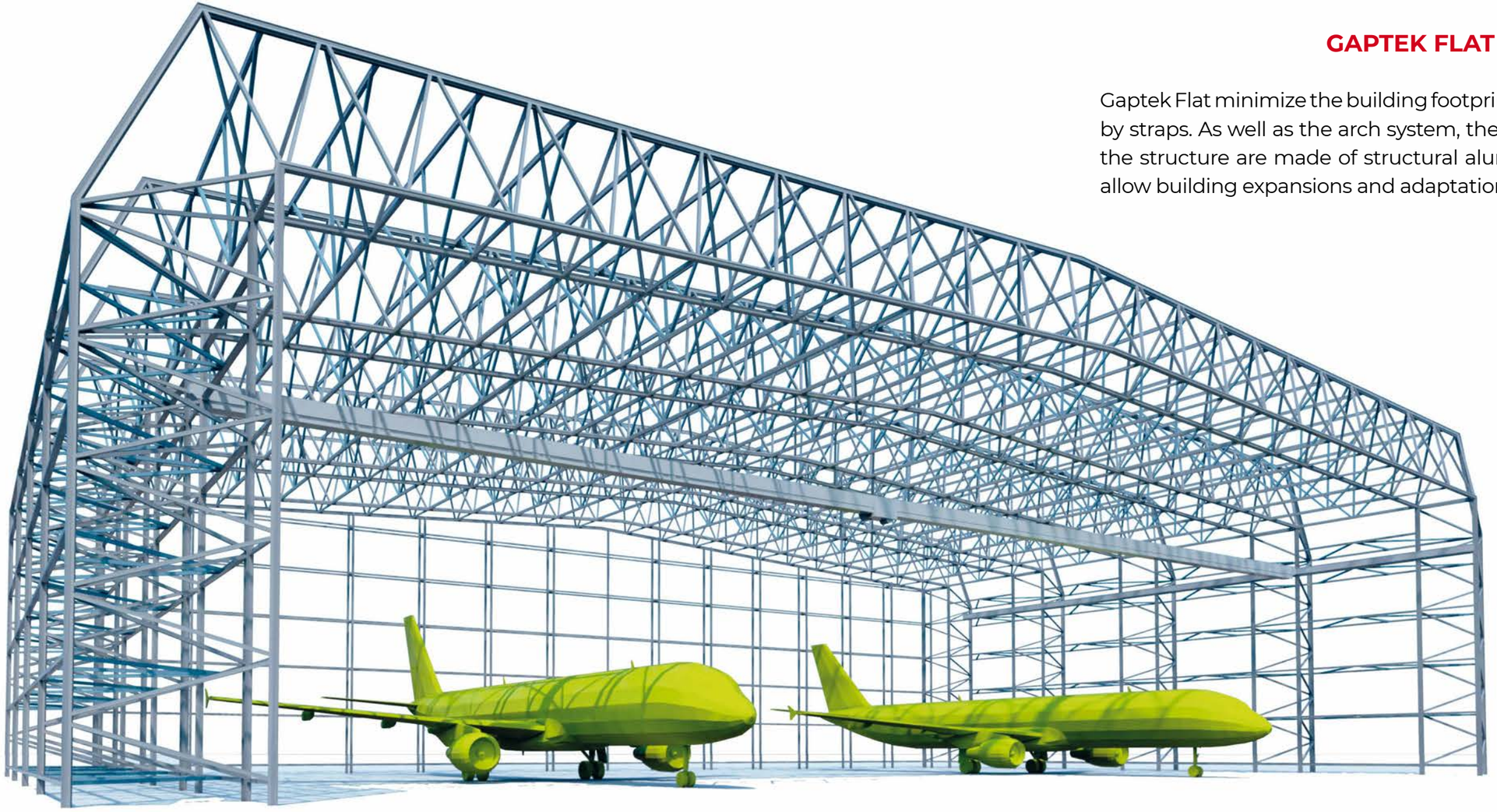
The Gaptek arch system allows to maximize the free interior space using the minimum structural material. As a result, it allows the construction of large span buildings without columns.





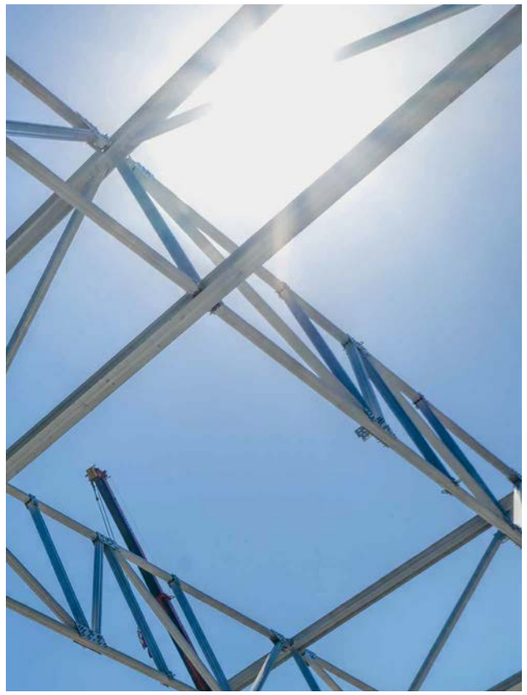


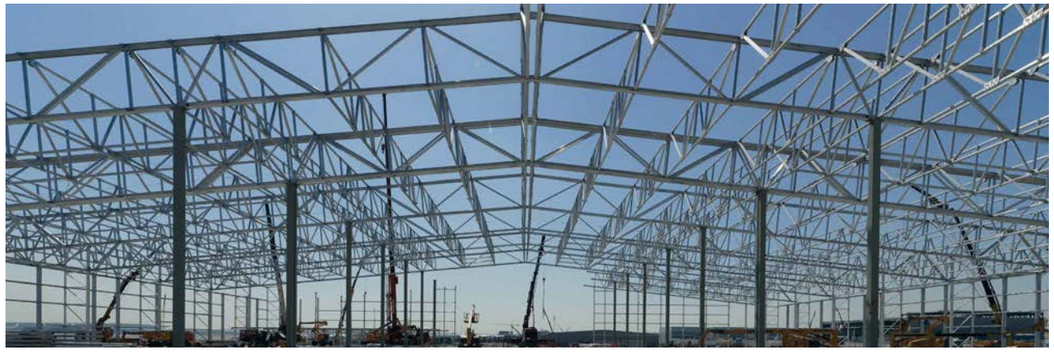


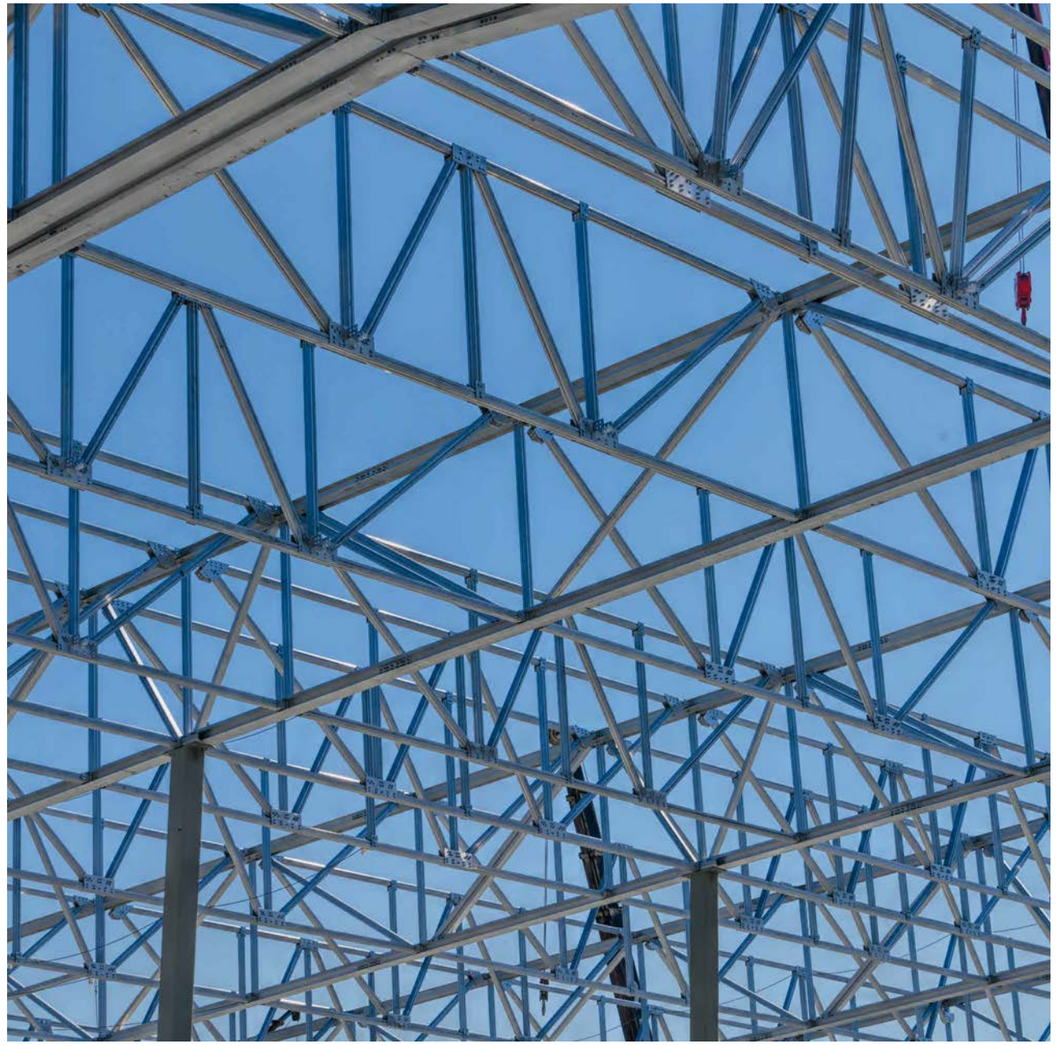


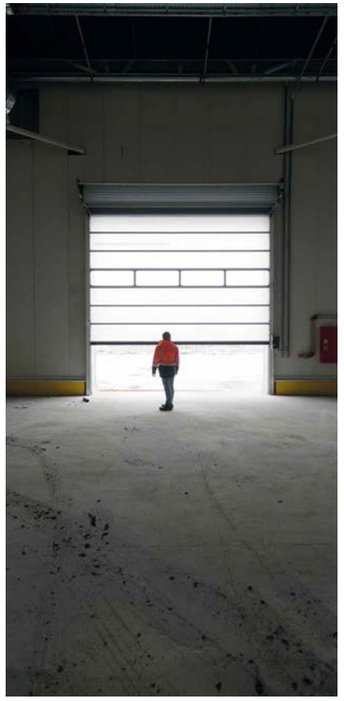
GAPTEK FLAT

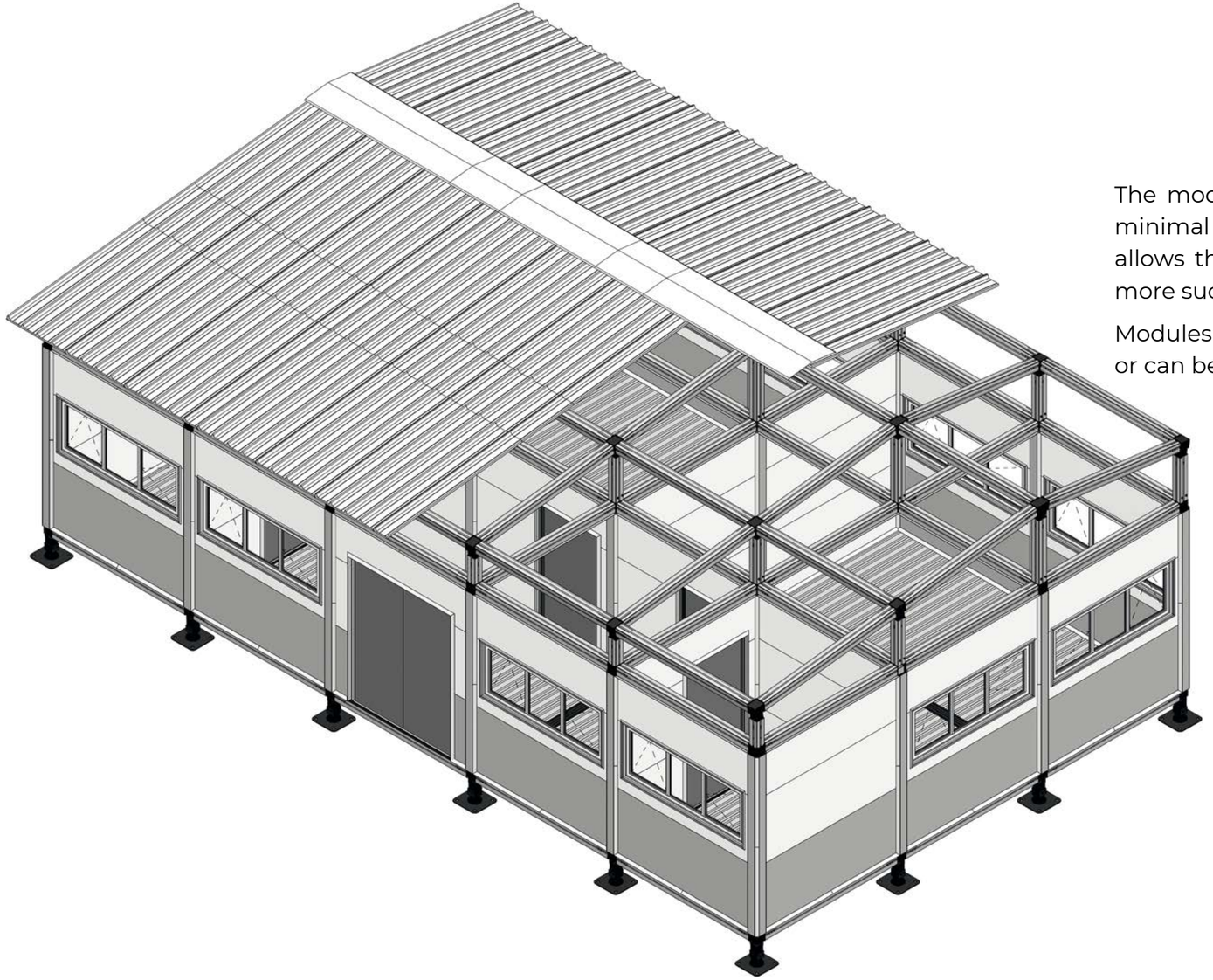
Gaptek Flat minimize the building footprint using gantries linked by straps. As well as the arch system, the profiles that compose the structure are made of structural aluminium. Its flat shapes allow building expansions and adaptations quickly and easily.











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.

Annex to hospital
Location: Granollers (Spain)
Surface: 225 m²
Execution time: 4 weeks

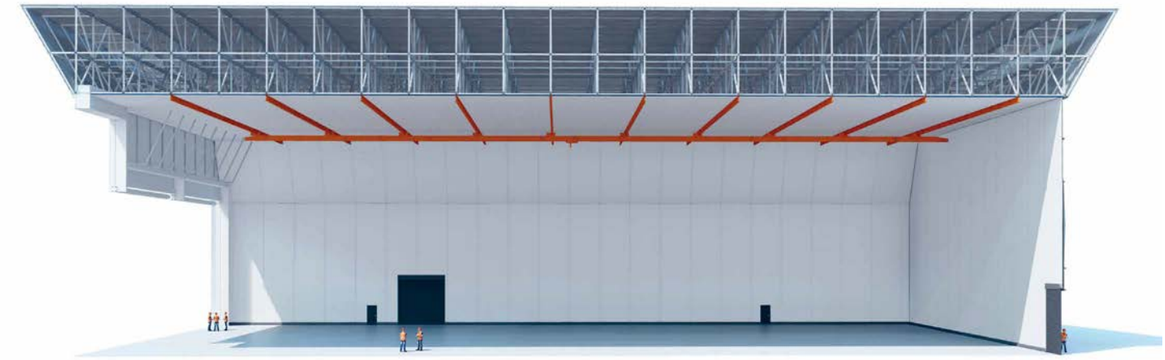
300 beds hospital
Location: Niger
Work in progress

Offices attached to Hangars
Location: Zaragoza (Spain)
Surface: 2.865 m^2
Execution time: 14 weeks

The Gaptek system adapts to the needs of each project. Quality, flexibility, durability, efficiency and profitability are key properties in all our designs.

Thanks to the use of modular structures, we create buildings capable of adapting to changes and new market's needs. Our design conception is dynamic, and we equip the structures with the necessary technology so that they can be easily transported and eventually relocated.

This allows you to save part of the costs of a new construction, to expand the original design and also adapting it to a new function.



Hangar Fokker Techniek
Location: Hoogerheide (Netherlands)
Surface: 6.000 m²
Execution time: 24 weeks

Air Cargo Alaire
Location: Madrid-Barajas (Spain)
Surface: 3.356 m^2
Execution time: 23 weeks

Aerojet Temporary Aviation Training Facility
Location: Accra (Ghana)
Surface: 1.110 m^2
Execution time: 23 weeks

Premium Aerospace Center Hangar Extension
Location: Oklahoma (USA)
Surface: 1.829 m^2
Execution time: 20 weeks

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.

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

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.

Maintenance Hangar for the A400M
Location: Zaragoza (Spain)
Surface: 5.040 m²
Execution time: 22 weeks

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.” *****

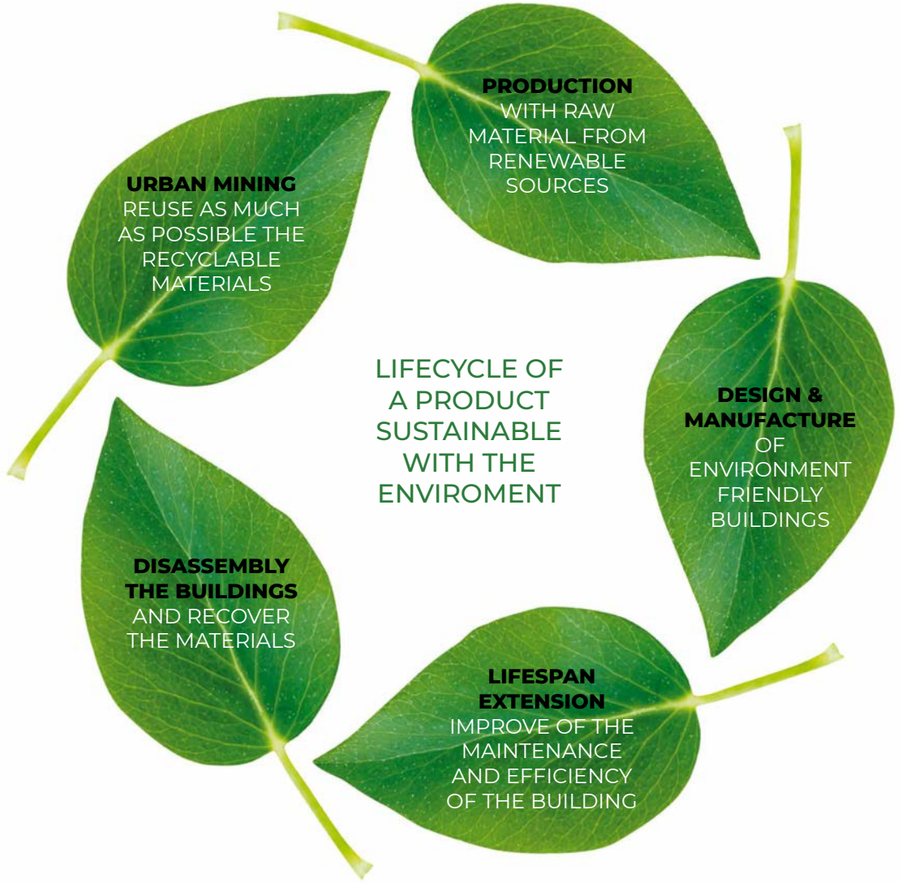
(*) https://ec.europa.eu/clima/policies/strategies/2050_en

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 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
INNOVATION FOR A SUSTAINABLE BUILT ENVIRONMENT



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.

Aluminium is a I00% infinite material that can be fully recycled without losing quality or physical properties.



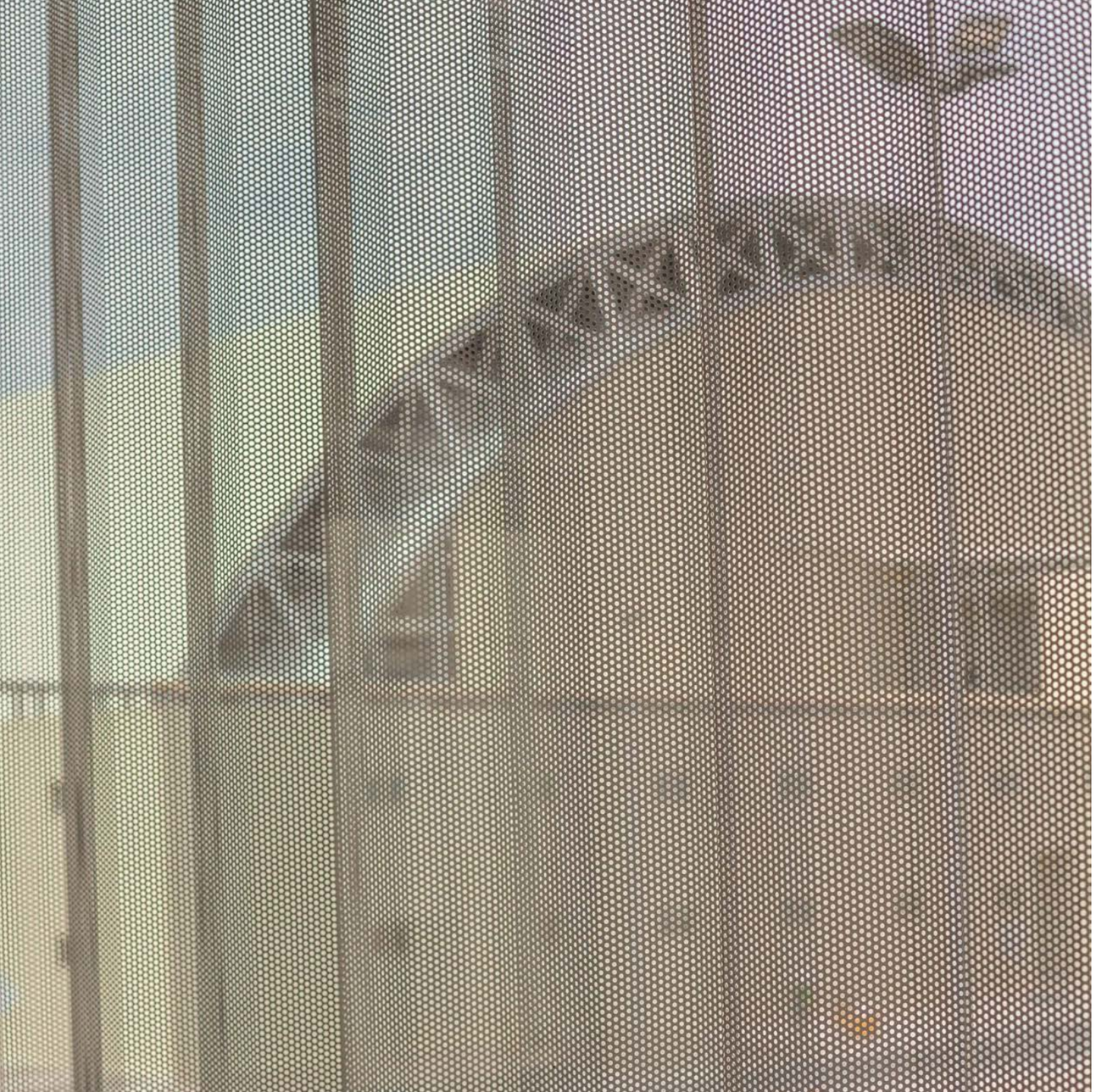



PERFORMANCES OF THE BUILDING AND ECONOMIC SAVING

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



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

Strategy definition

Initial meeting

Information Exchange

Project approval

PROJECT DEVELOPMENT

Summary and preparation

Concept design

Design development

Technical design

MANUFACTURING

Material purchase

Manufacturing

Quality control

LOGISTICS

Packaging

Shipping
and transportation

ASSEMBLY

Civil works

Building assembly

MEP's installation

Delivery

AFTERSALES

Project Management

24h Support

Maintenance

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

AENOR GESTIÓN DE LA CALIDAD ISO 9001 · AENOR GESTIÓN AMBIENTAL ISO 14001 · AENOR SEGURIDAD INFORMACIÓN ISO/IEC 27001 · AENOR SEGURIDAD Y SALUD EN EL TRABAJO ISO 45001 · CE EN 1090-1 · ICC INTERNATIONAL CODE COUNCIL · NFPA · INNOVATIVE SME · GOBIERNO DE ESPAÑA MINISTERIO DEL INTERIOR · GOBIERNO DE ESPAÑA MINISTERIO DE ECONOMÍA, INDUSTRIA Y COMPETITIVIDAD · Unión Europea Fondo Europeo de Desarrollo Regional "Una manera de hacer Europa" · EUROCODES BUILDING THE FUTURE

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GAPTEK

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