

**GSE, French market leader in logistics and industrial building  
design and construction,  
is launching MODULOG System by GSE**

**Why the need for MODULOG?**

There is an increasing demand for return on property investment, coupled with a drop in rental income. GSE has therefore developed a brand new approach to designing and constructing industrial and logistics buildings that combines top quality performance with highly competitive costs.

MODULOG is a highly innovative addition to the industrial and logistical building construction sector. MODULOG, part of the GSE range of products, is a building that is modular in size and layout and complements the traditional approach to turnkey buildings.

MODULOG is the fruit of the experience that GSE has built up over the last thirty years in designing and constructing industrial and logistics buildings. This experience has given GSE and its teams in-depth knowledge of its buildings' users as well as investors, authorities, and local government.

**MODULOG is a robust building that is fast to install and ensures low construction, running, and maintenance costs.**

## MODULOG meets 3 key requirements

- A TOTALLY FOCUSED APPROACH

GSE's experience with hundreds of customers has enabled it to clearly identify the key requirements of industrial and logistics buildings. MODULOG provides a well-designed solution to each of these requirements.

GSE began by carefully analysing and breaking down each key requirement. It then tested the proposed solutions and corrected them where necessary. Only then were they approved. GSE chose the very best of these fundamental solutions to create MODULOG: solutions that use the simplest of means to offer maximum efficiency.

Thanks to its track record in constructing millions of square metres, GSE has built up an unrivalled wealth of experience that quickly led to the successful completion of the MODULOG project.

- SOLID COMPONENTS

Investing in property is a major step, calling for uncompromising levels of reliability and durability.

Building users put elements such as floors, loading bays, and technical facilities to taxing uses. These elements are therefore designed and selected to last. MODULOG does not compromise on the sturdiness of its components.

- FAST HIGH QUALITY CONSTRUCTION

The MODULOG approach is based on expertly designed modular elements.

All new projects are made up of a combination of modules. This provides a fast and overall vision of the project with every element defined down to the smallest detail.

This approach means that industrial-scale components are used systematically. The construction project is based on assembly of prefabricated elements in controlled conditions targeting quality, safety, and speed.

A 30,000 square metre MODULOG project is completed in less than 100 days. The construction site can be up and running after just one month of preparations, once a building permit has been obtained.

## **MODULOG is designed as a set of building blocks**

**MODULOG works as a set of building blocks where the basic modules fit together to create the overall project.**

The basic unit is the MODULOG base module. MODULOG offers four units in different layouts so users have more flexibility in the shape of their buildings.

Each standard base module is the result of a complex equation.

The module system is organised around the palette. It is a function of factors such as the limitations imposed by rack storage, alley widths and uses, the statutory size of units (6,000 square metres), position of sprinkler heads, electrical lighting, structures (posts, girders, and roof trusses), exterior structures and loading bay doors.

The different modules can be assembled in a multitude of different ways to meet the user's needs whilst optimising site occupation.

The module approach avoids the need to repeatedly design a prototype for each new project. Each module is painstakingly designed, and the design is then applied to each new project.

The construction components are identical for all units and all MODULOG projects. They are produced industrially, guaranteeing quality, and providing the major economies of scale that come with mass construction.

The standard products are assembled at the construction site, leaving no room for the unforeseen events, mistakes, and errors that lead to wasting resources and time.

MODULOG projects are simply designed, using robust products and concepts that are inexpensive to operate and maintain.

**GSE has decided to offer its customers all these benefits via MODULOG: an efficient and reliable concept that meets the needs of both investors and users.**

## **MODULOG meets sustainable development requirements**

### **MODULOG reduces CO<sub>2</sub> impact by 50%**

- The building's structure is in glued laminated timber, one of the rare construction materials to have a low carbon impact.
- The jointless flooring helps to reduce the greenhouse effect by 10.5% compared to traditional flooring.
- MODULOG guarantees substantial energy savings.

### **MODULOG reduces energy consumption**

- An innovative electric lighting system in the warehouse area is confined to the alleys, reducing consumption by 50%.
- The least expensive and polluting energy is the energy we don't consume! Thanks to its thermal insulation, the inertia of the building and stored thermal products, and the design of the sprinkler installation, MODULOG does not use heating. Heating is of course available as an option for business activities that require it.

### **MODULOG is an energy-producing building**

- Invisible from the ground, the roofs of industrial buildings are ideal sites for generating photovoltaic energy. NAZCA, a GSE Group company specialising in turnkey installation of photovoltaic units, has developed a special MODULOG product.

**MODULOG is designed to meet the regulations of the different countries where it is developed.**

**Tried and tested technical choices**



MODULOG buildings benefit from a design based on exhaustive and highly detailed research.

- The heavy vehicle manoeuvring area for logistics buildings is generously sized. The loading bay equipment is designed and selected to ensure reliable, smooth, and fast loading and unloading. Racks are given an optimum position.
- The building has a mixed structure: reinforced concrete posts, the ideal material for bearing heavy vertical loads with good resistance to everyday impacts, and a horizontal structure of girders and roof trusses in glued laminated timber, a lightweight material that is easy to transport and highly fire resistant.
- The floor is in metal fibre reinforced concrete without the sawed joints that can be weak points. The construction joints are reinforced with a solid metal section (GSE patent). The floor is constructed to include a series of specific mechanisms, the result of many years of experience. The implementation process is painstakingly overseen for each project.
- The roofing system, a design registered by GSE, allows rain water to run off onto the building's edges. No water accumulates on the roof; there is no need for water drainage networks in the building, and no under-floor networks. All of which adds up to savings, safety, and peace of mind!

A special module for offices and employee areas is available. Its size can be adapted to meet the needs of all users. The office exteriors are in architectonic concrete with large glass openings to provide the premises with natural light.

### **MODULOG project financing**

In addition to its turnkey design and build services, GSE offers legal and financial packages under certain conditions for implementing MODULOG projects.

After examining the financing dossier, GSE can offer basic rental solutions based on a lease. The terms of the lease are defined according to various parameters, notably the type of project, its location, and the length of the lease.