



NEWS OF 2014 - GSE, THE MARKET LEADER IN AUTOMATED AND HIGH-BAY WAREHOUSES

GSE has chosen very early to invest in the complex engineering and capitalized expertise with the completion of six major projects in France and abroad totaling no less than 400 000 m² of logistics platforms and thus positioning GSE as Design and Build Turnkey Constructor with the most experience in this area.

As a leader on the real estate market logistics, we have to be experts in this field and whatever the dry storage type, positive cold It also means knowing how to adapt to different administrative environments and be able to work with different business processes.

Entrust GSE for the implementation of a highbay project, is to ensure an unparalleled expertise to manage risk, optimize costs, control delays and secure the overall performance of the building and its process.

The optimization of retail logistics sector to remain competitive and the development of e-commerce, which requires timely delivery of ever shorter lead sometimes the implementation of automated warehouses. New challenges for the entire supply chain. These logistics buildings that integrate automated processes assume a high bay storage to accommodate a transtocker. These are complex projects that must be managed from the design phase. Design, build and implement a high bay building needs special skills and qualities. This implies a fine and detailed engineering and certainly more complex than extensive storage building often referred commonplace.

The stakes for success of such projects are of several kinds:

- A perfect collaboration between the client, the process supplier and GSE
- The ability to manage complex projects with many companies
- The regulatory compliance and permits obtaining for projects often perceived as atypical
- A global vision to ensure the optimization at the study phase and a well rehearsed coordination during the construction phase

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- Optimum management interfaces including siding, roofing, fire protection system in the case of free-standing silos
- The distribution and transmission loads more sensitive than on a project called "classic"
- A very precise sequencing work with process suppliers

If these skills can be learned, the quality of the team in charge of these projects are the result of a corporate culture and which results

- A curiosity for the ecosystem and the purpose of the project
- The fine understanding of the functions that should serve the building
- The ability and taste for collaborative work between the user, the process supplier, process engineering and building work teams)
- The ability of the Design and Build Turnkey Contractor and the whole team to respect commitments
- Understanding the challenges of the supply chain

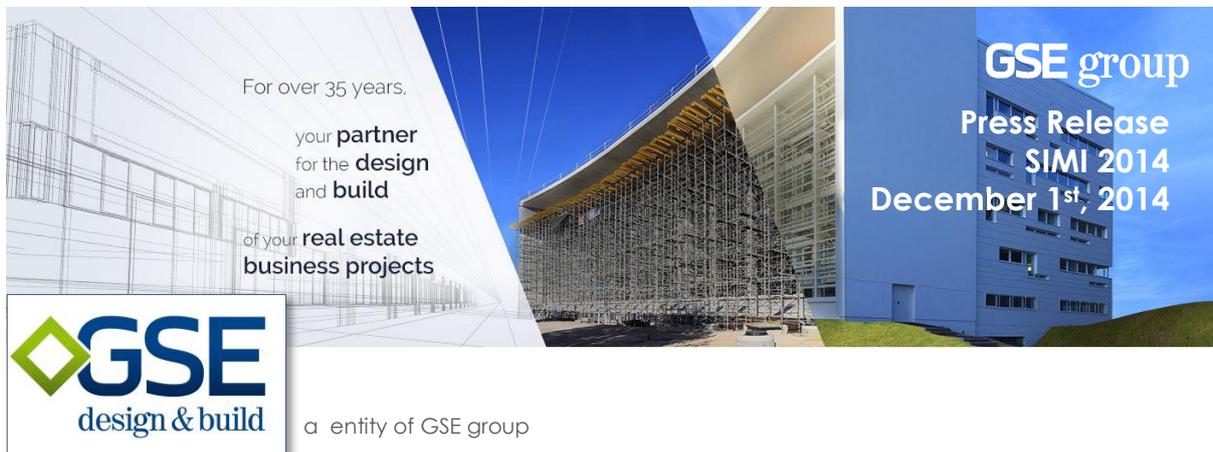
GAZELEY / ADIDAS - RIESTE – GERMANY

Construction of a high-bay warehouse 75 000 m² including 5300 m² of offices and social rooms

- 36 m tall storage of 23 000 sq.m.
- HQE certification
- Interior comfort offices
- high-bay storage by with a complex technical implementation of foundations and other stability requirement.
- Achievement near a motorway junction
- 73,000 m² of cut and fill work
- Reception areas / specific shipping
- cameras security system and access management
- Technical lots suitable for large area

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JYSK - RADOMSKO – POLAND

GSE has conducted on behalf of the company Jysk (Danish chain of shopping centers in home furniture) a logistics platform in Radomsko in Poland. The Radomsko site hosts two highbays a height of 40 m with a storage capacity of 175,000 Euro pallets for an occupancy ground of 27,000 sqm. This highbays part is undoubtedly the most spectacular of all achievement. The fully automated storage system can store a large volume of goods concentrated on a small ground occupation

- Design, development and implementation of the process
- Retaining wall to consolidate the soil highbays
- Building characterized by an overall visual unity
- Anti fire device
- Heating and lighting ensuring a constant temperature and humidity
- Realization of highbays with complex technical implementation foundations, high stability requirement
- Management of goods by barcode
- Tunnel linking to local social warehouses
- Outdoor areas for compliance with safety regulations development

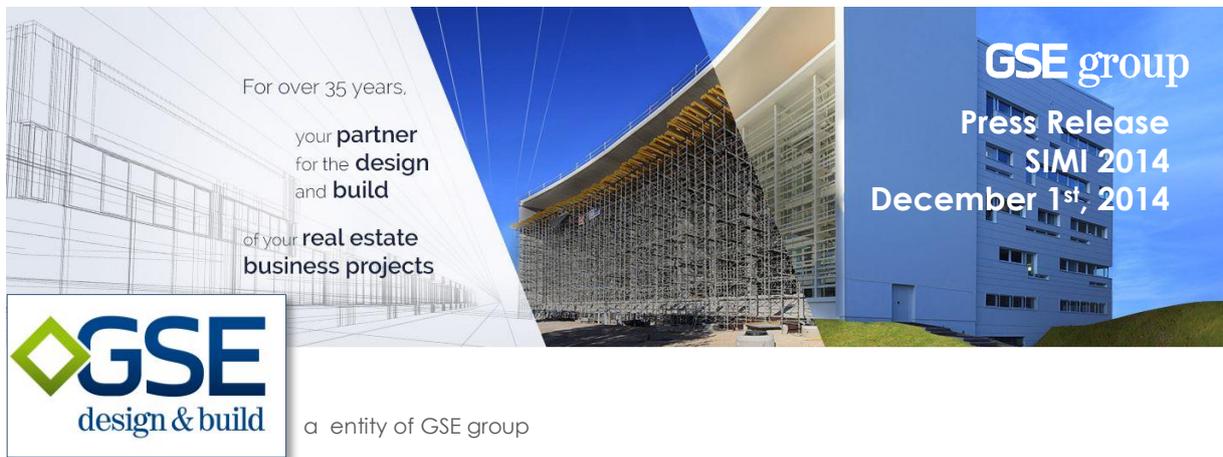
COOP - JESSHEIM – NORWAY

Construction of a logistics platform 50,000 m² multi-temperature with 3113 m² of offices.

- Highbay area dry goods storage: 18,963 m² (+10 to + 25 ° C), free height of 6/23 m fully automated.
- Area of shipping / receiving: 9197 m² (5 ° C), free height of 6/19 m
- Fruit and vegetable storage area: 5938 m² (7-13 ° C), free height of 9/19 m
- Positive cold storage area: 9958 m² (0-4 ° C), two levels of a free height of 19 m
- Negative cold area: 3074 m² (-10 to -25 ° C) with a free height of 6/19 m

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RECALL

This storage building called "Mignières Megasite" was designed to optimize the densification of active archive storage. Its structure allows the use of the stacker crane technology to improve the working conditions related to handling. This project developed over a gross floor area of 14,355 m² reaches a height of 24 m farm.

To meet the constraints of the PLU imposing a height of 20 m above ground, a complex technical solution was developed by partially burying the building.

IKEA

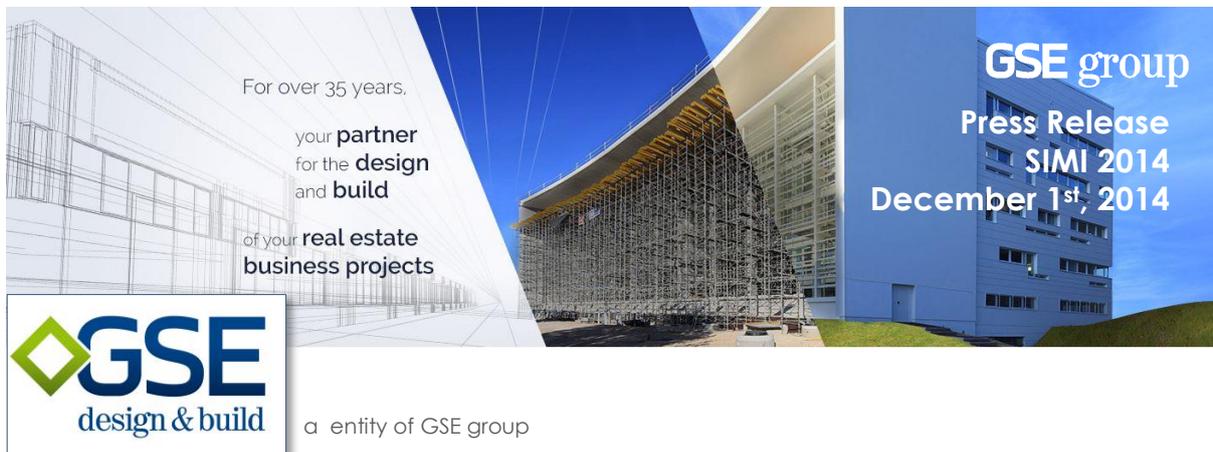
GSE has achieved a logistics platform of 70,000 m² for Ikea in Shanghai. The building is equipped with 6 stacker cranes and has a height of 25 m. This building is one of the flagship projects of the Swedish company. The building also includes a block of offices in R 2.

GAZELEY / ASDA

GSE has achieved an international distribution center for Asda (project developed by Gazeley) on the Magna Park Leicestershire England. The project of a size of 110,000 m² includes offices, a canteen and a gym centre and Bay High storage areas 16 and 30 meters high.

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NEWS OF 2014 - GSE, AN EXPERT IN THE DESIGN AND BUILD APPROACH FOR RESEARCH CENTERS

For 35 years, GSE has developed a recognized expertise in the business of science and R & D, particularly for its expertise in clean rooms.

The services offered for the management of these projects:

- needs analysis, programming, the establishment of the Master Plan,
- feasibility studies, compliance, streamlined flow
- the overall design, including the building, around the industrial process,
- energy choices and justification in terms of return time
- achievement in a contractual framework guaranteeing costs, deadline and performance with real commitment,
- documented reception or validation of facilities for the specific case of pharmaceutical applications: master plan, implementation of operating procedures, qualification (DQ, IQ, OQ, PQ).

The last reference GSE accounts is the R & D center which is being produced for Air Liquide in China.

GSE has won the realization of the new "Shanghai Research & Technology Center" (SRTC) of Air Liquide Group, located in Xinzhuang industrial park, Minhang District, Shanghai. The construction began in November 2014 for a delivery expected end 2015.

This 14,000sqm facility will consist of offices, including a conference room for 140 people, laboratories and ISO 8 clean rooms connected to high bay pilot halls.

Scientifics from Air Liquide, world leader in gases, technologies and services for industry and health, will work in several research areas including energy efficiency, technologies for reducing industrial CO2 emissions, water treatment and methods for preserving and freezing food.

For this project, GSE assisted Air Liquide on the design but also on the qualification of the land.

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The design had to meet several objectives:

- Develop an esthetical architectural design, efficient and rewarding,
- Create functional spaces facilitating exchanges between users,
- Achieving environmental certification according to both LEED (Leadership in Energy and Environmental Design) and the Chinese Green Building 2 Star.

For this project, GSE has demonstrated:

- His deep knowledge of the Chinese construction market (18 years of presence and more than 1 million square meters delivered),
- His technical expertise in R&D buildings,
- A secured approach by proposing a turnkey contract.

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