SUCCESS STORY

New Audi Logistics Center in Mexico: Planning for 3.5 Years on Several Levels

PLANNING | OPTIMIZATION | QUALIFICATION
To date, one of the most challenging projects outside of Europe

In Puebla, Mexico (MX) Ingenics logistics experts have supported the entire planning, design and ramp-up of Audi’s new logistics center – including implementation of all processes. Due to size and complexity, for Ingenics this achievement has been one of the most challenging projects outside of Europe. For Audi it meant the proper consolidation of its new Mexican facility, where Q5 SUV vehicles are being produced.

During the entire project, perfect synchronization between Ingenics’ logistics experts and the Audi team was required in order to accomplish the complex tasks: e.g. warehouse planning, creation of facility tender, definition and calculation of storage capacity, intralogistics process definition, and ramp-up support.

Initial planning began in Germany in April 2013. For the next 3.5 years the Logistic Building, Trailer Yard and Container Yard were planned on several levels, always considering the defined baseline operating principles and goals. „In the end, each of these guiding principles and goals were incorporated into the main design objectives of the new Audi facility in Mexico: the production capacity of 150,000 Q5 vehicles per year“, says Justo Perez, General Manager at Ingenics‘ office in Puebla.

About Audi

Audi is the first premium automobile manufacturer with product facilities in Mexico. The company aims to manufacture 150,000 of Audi Q5 vehicles each year on a newly developed site covering a good 400 hectares (988 acres) with a press shop, body shop, paint shop, assembly lines, and a logistics center.

www.audi.com.mx
To begin, Ingenics took over warehouse planning, intralogistics process planning, warehousing process design and IT storage strategies configuration. Warehouse planning included key tasks such as calculation of areas, space, and distribution as well as material handling equipment calculations, specifies Justo Perez. “In addition, intralogistics planning included internal material flow planning, staff calculation, and equipment planning. The main focus of warehousing process design was based on solid storage strategies and storage ID design, finally complemented by unique and innovative configuration of IT storage strategies.”

Next, Ingenics designed all intralogistics and receiving processes, responding to customer needs and ensuring correct implementation through several training sessions and operational simulation tests under high material demand conditions. Furthermore Ingenics experts showed a high level of flexibility and adaptability in their daily operations, triggered by changes presented during the ramp-up process. According to Justo Perez „a common situation in these kind of processes.”

The logistics center ramp-up was successful primarily due to perfect coordination with the Audi team. This involved the logistics planning department, assembly team, transportation control (LKW), material disposition, IT, plant security, BIW, and also integration of the selected 3PL companies in the planning process.

As once more impressively demonstrated by this case, Ingenics is known to be one of the best partners for result-oriented engineering and logistics consulting – in Mexico as well as in any part of the world. Last but not least, Ingenics has developed a high level of expertise through more than 35 years of operating experience and more than 5,600 successful projects, which guarantees a systematic and proven procedure for every single project. Ingenics’ consultants expertise combined with Ingenics’ methodology and excellent coordination with the Audi team allowed the impeccable execution of this project.

The most important project results and Ingenics performances:

› Planning and design of Warehousing and Intralogistics processes

› Definition and calculation of storage capacity

› Internal material flow planning

› Staff calculation & Equipment planning

› Creation of facility tender

› Ramp-up support

“Thanks to our support, the customer is now able to train its own staff and to maintain a continuous improvement of these processes.”
Tobias Katai, Ingenics project manager, associate partner, and key account manager
In a nutshell, the core services of Ingenics can be summarized in three words: Planning. Optimization. Qualification. Or, to put it simply, efficiency improvement³. Our main focus is on three central areas of business – factories, logistics, and organization. Ingenics’ history in these areas has been sustained for more than 35 years. Benefit from unique experiences gained over the course of more than 5,100 successful projects. Discover how, considering your goals and objectives, we create space for your sustainable corporate success.