





Overview

Largest pharmaceutical production plant in Africa

The French pharmaceutical company Sanofi built a facility in Sidi Abdellah (Algiers) which is the biggest complex of production and distribution of medicines in Africa. In this framework, Technip Energies was awarded the execution of a new distribution and production plant of 17.000m2 for Oral, Solids and liquids forms.

• Contract: CD + EPCmV

• Award: 2013

• Delivery: 2018

• Client: Sanofi Aventis

• Location: Algiers, Algeria



Largest pharmaceutical production plant in Africa



Total investment cost of 85 million EUR



130,000 man hours for engineering and construction supervision



Greenfield industrial site covering 6.5 hectares



Challenge

Design and construction of a new greenfield facility in Algeria

The challenge was overcoming design and construction difficulties at the Sanofi pharmaceutical production and distribution project at Sidi Abdellah, Algeria. The construction site had no utilities; generators supplied power. The region had also high seismicity, requiring special attention to structure resistance: 13m height racks were dedicated to finished product (4000m3, and 15.000 pallets), a tridi was used on an ultra-flat slab,... And the facility had to be designed and built to enable production and distribution of 100 million drug units per year, representing 80 percent of Sanofi's output in Algeria.

Greenfield was a big challenge, thus, at the production launch, the plant was still running with a power generator. The goal of this new site is to replace the other two existing units of Sanofi in Algeria. The new distribution area will allow Sanofi to export its tablets, syrups & packets to Africa.





Technologies

Production of three types of drugs: tablets, syrups & packets.

The project consisted of a plant for the production are oral, solid and liquid: with logistics office, warehouse with pharmaceutical production and the distribution center. Our team performed the conceptual design, basic design, permitting, Engineering Procurement and Construction management and commissioning. The commissioning of the pharmaceutical site was critical to ensure all systems and rooms were designed, installed, tested, operated and maintained according to strict

operational requirements (client and local regulations). During commissioning, contamination barriers had to be checked, air quality confirmed and purified water system. These environmental conditions were necessary to guarantee the conformity of the pharmaceutical products and perform the pharmaceutical validation. Once certified, manufacturing and distribution of the pharmaceutical products could start.





Solutions

An integrated approach

Mobilizing an integrated team of regional and international engineers (French, Spanish, Portuguese, Brazilian, ...). and other critical personnel was key to the success of this massive project. We worked closely with Sanofi engineers and managed numerous local and international companies during field construction.

Local staff from our operating center in Algeria played an important role, as did other operating centers in France (Paris, Lyon, Normandie). The outcome: A modern plant featuring a logistics office, a warehouse and a state-of-the-art facility dedicated to the production and distribution of more than 100 different pharmaceutical products from pills to powders to syrups.







Results

Successful completion in October 2018

Completed in October 2018, the construction and commissioning of the massive, 22,000-square-meter Sanofi pharmaceutical production and distribution facility met all client expectations. Expert project management skills and integrated execution were keys to the facility's success. Our team continues to work at the site with Sanofi personnel refurbishing existing spaces to accommodate the anticipated production of a new drug product.

66 A new benchmark for pharmaceutical production greenfield in Africa