# SINO PHARMENGIN CORP., CHINA

## Key Facts

**Company:** Sino Pharmengin Corp.

**Website:** www.pharmengin.com

**Industry:** Pharmaceutical

**Country:** China

**Products Used:**

- CADWorx®
- Isogen®

**Key Benefits:**

- Provided building information modeling (BIM) for large, complex pharmaceutical facility
- Eliminated costly clashes and rework
- Improved productivity by 20%
- Enhanced accuracy by 30%

## SINO PHARMENGIN SUCCEEDS WITH CADWORX® IN PHARMACEUTICAL SECTOR

Sino Pharmengin Corp. (Pharmengin), a subsidiary of China National Pharmaceutical Group Corp., is a leading engineering, procurement and construction firm serving the pharmaceutical industry. Formed from combining the Chongqing Pharmaceutical Industry Design Institute CPIDI and Wuhan Pharmaceutical Industry Design WPIDI, Sino Pharmengin Corp. is affiliated with China National Pharmaceutical Group Corp., the largest state-owned pharmaceutical and health care company. The firm's 600 trained and registered staff members include 10 experts with State Council Awards and three industrial design specialists. More than 200 employees have earned registered licenses and certificates.

### IDENTIFYING GOALS

For this project, Sino Pharmengin Corp. needed to design a pharmaceutical plant producing over 2 million medical doses per day.

### OVERCOMING CHALLENGES

This building information modeling (BIM) project included a building 70m long, 23m tall and 40m wide. Pharmengin chose CADWorx to design hundreds of pieces of equipment, 872 unique piping systems with sizes ranging from 15mm to 300mm and more than 2,000 isometric drawings.

The large Chinese Medicine Industrial Park (CMIP) project has a gross floor area of 55,000 square meters including workshops of pretreatment, extraction, preparation and powder. The extraction plant building is 66m long, 30.3m wide and 23.4m high. In addition to mechanical, electrical and plumbing, Pharmengin designed 250 sets of equipment and 872 piping systems with diameters ranging from DN15 to DN300.

## REALIZING RESULTS

This project was the first use of CADWorx for a pharmaceutical project in China. Pharmengin was able to improve productivity by 20% and enhance accuracy by 30%. The BIM multidisciplinary design included the workshop, equipment, process pipes and mechanical, electrical and plumbing (MEP) over three months.
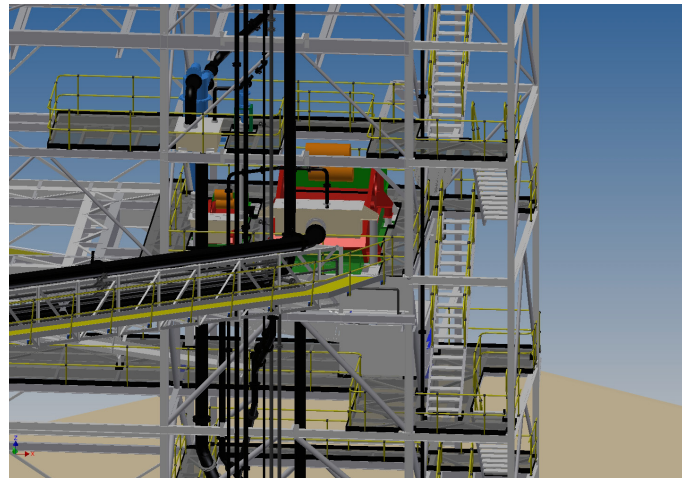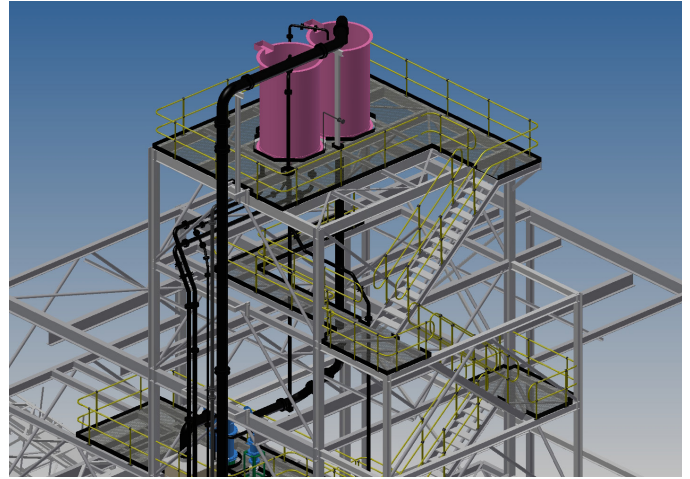
Pharmengin leveraged CADWorx for construction drawings, including a total of 872 isometric drawings using Isogen, plus videos and pictures to form a visual impression of the model. CADWorx proved easy to use and helped solve complex engineering problems, expedite construction and improve productivity and accuracy.

"CADWorx has been proven to be highly suitable for pharmaceutical engineering in China," explained Jia Xie, marketing manager at Pharmengin.

"It is capable of multi-disciplinary collaborative design and provided success for Building Information Modeling (BIM) and Mechanical, Electrical and Plumbing (MEP), including complex projects and confined spaces," he said.

## AWARD-WINNING PROJECT

Pharmengin received the CADWorx Drivers of Success Runner-Up Award for its use of the software. The annual Drivers of Success competition recognizes innovative applications of Intergraph products, impressive project results, and significant benefits from collaboration among disciplines and the integration of the products.

## ABOUT HEXAGON

Hexagon is a global leader in sensor, software and autonomous solutions. We are putting data to work to boost efficiency, productivity, and quality across industrial, manufacturing, infrastructure, safety, and mobility applications.

Hexagon's PPM division empowers its clients to transform unstructured information into a smart digital asset to visualize, build and manage structures and facilities of all complexities, ensuring safe and efficient operation throughout the entire lifecycle.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 20,000 employees in 50 countries and net sales of approximately 3.8bn EUR. Learn more at hexagon.com and follow us @HexagonAB.