

# BIM beats complexity in design for Great Wall Motors

'IMPROVING LITTLE BY LITTLE EVERY DAY' IS WHAT DRIVES CHINESE CARMAKER GREAT WALL MOTORS COMPANY TO GROW AND EXPLORE NEW HORIZONS. SOON, THEY WILL BE ABLE TO BUILD AND SELL CARS IN RUSSIA. WITH A PRODUCTION CAPACITY OF 150,000 VEHICLES PER YEAR, THE NEW FACILITY CAN BE DESCRIBED IN A SINGLE WORD: GIGANTIC.

Established in 1984, Great Wall Motors Company Ltd is China's largest sport utility vehicle (SUV) producer. For the new production facilities, the company acquired a 229 ha plot of land in Tula Oblast that will comprise over 70 buildings and objects in production, as well as residential areas with 2,500 working places. Despite a relatively short deadline, the whole project - from concept design and permitting to detail design, fire-fighting solutions and environmental impact assessments - was thorough and completed.

## Teaming approach

The project is a good example of teaming and involving Tebodin's worldwide network experience and capabilities. Besides different subcontractors, more than 100

Tebodin engineers from 7 countries were involved, all coordinated by the Ukrainian office. 'This border crossing, expertise based teaming approach is in my opinion the only way to execute these large and complex projects', says BIM Director Aleksandr Nikitin. 'In order to effectively realize this approach, we used BIM technology (Building Information Modelling)'.

## One model for all

In view of the scale, complexity and tight time schedule of the project, the engineering and design team took the strategic decision to use BIM technology from the start. It allows to create a detailed 3D building design, based on the input of the different disciplines, in all



Aleksandr Nikitin

different stages – from concept to detail design. It decreases time on design work, avoids clashes and decreases collisions, and provides real-time lists of materials, specifications and equipment. One model for use of all.

## Indispensable

Great Wall's Project Director Mr. Dong Zhangqun: 'BIM was not a Great Wall Motors requirement, but seen the many advantages we experienced in our complex

project, it has proven to be indispensable. We were able to review live models in every single stage, with both our team and Tebodin's. BIM was not only very efficient, but also very helpful in bridging the cultural and language differences'.

Aleksandr concludes: 'BIM is the standard for large-scale and complicated project execution. Based on our experience on the Great Wall project we see a bright future for BIM'. ■