## Frontrunner RondoCarton demands 4D design

THE RONDOCARTON PRODUCTION FACILITY IN TARGOVISTE SETS NEW STANDARDS IN THE CORRUGATED BOARD INDUSTRY IN ROMANIA, WITH STATE-OF-THE-ART MACHINES PRODUCING TOP QUALITY PACKAGING. NOW THE COMPANY NEEDS MORE ROOM TO MEET THE GROWING INTERNATIONAL DEMAND FOR ITS PRODUCTS AND IS ADDING A 15,500 M<sup>2</sup> EXTENSION TO THE 2008 PLANT.

Parent company Rondo Ganahl has appointed Tebodin as EPCm contractor and expects the extension to be fully operational by January 2018. For the design, completed in 2016, Tebodin in Romania closely cooperated with their colleagues in Ukraine, who are specialists in 3D design. Romanian Country Director Ivo Rousar: 'The Rondo Carton project required extensive engineering knowledge to be able to put together requirements for the building design and to match it with constrains given by technological process. We involved specialist colleagues'.

## 2D-3D-4D design

Tebodin architects from various countries put Rondo Ganahl's ideas to work with the use of the 3D modelling program Autodesk Revit. This Building Information Modelling (BIM) software for architects, structural engineers, MEP

engineers, designers and contractors, developed by Autodesk. The program allows users to design a building and structure and its components in 3D, annotate the model with 2D drafting elements, and access building information from the building model's database. Revit is 4D BIM capable with tools to plan and track various stages in the building's lifecycle, from concept to construction and later demolition.

## Mobilizing network expertise

'The most challenging part of the project was that we needed to implement quick changes into the 3D BIM model after principle solutions were changed in the 2D documentation,' says Mr. Eugene Dolia, architect at Tebodin in Ukraine: 'We did this through proper use of various Revit tools and the mobilization of our network expertise.'

Working with experts from different offices through time constraints and information gaps required intense cooperation and quick communication. 'Even in the short time allocated, we managed it by good coordination in real time,' says Ms. Laura Istrate, architect in the Tebodin office in Romania.

## Forward-thinking

Rondo Ganahl Aktiengesellschaft is an originally Austrian manufacturer of corrugated board packaging. The family business was founded in 1797 and now, besides Austria, also has plants in Hungary, Romania and Turkey.

The company shows its commitment to long-term solutions and responsibility through their dedicated production of recycled corrugated case material, for which they actively collect used paper and packaging.

