In recognition of the centennial anniversary of Daniel Burnham’s first architectural Plan of Chicago (1909), and to help promote Chicago’s bid to host the 2016 Olympic Games, the Chicago Architecture Foundation unveiled the first large-scale model of the city of Chicago, created largely via the stereolithography (SL) process using Somos® stereolithography materials exclusively from DSM.

Each of the more than 1,000 building structures included in the “Chicago Model City Exhibition” were made from Somos® high-performance stereolithography resins, including Somos® WaterShed XC 11122, Somos® ProtoGen Gray 18920, and Somos® 14122.

Chicago-based Columbian Model & Exhibit Works, along with the Chicago Architecture Foundation, chose rapid prototyping technology as the best way to create the model. After constructing accurate digital models of the buildings, rivers and roads, modelers then helped assemble and prepare the data for the stereolithography equipment that would create each part.

“These buildings, made from Somos® material, were undeniably the best choice for models of this scale and importance. The buildings have outstanding detail, stability and are easy to finish and paint,” says Catherine Tinker of Columbian Model & Exhibit Works.

In addition to supplying all SL resin needed for the project, DSM joined with Baxter Health Care and Molex to create each of the building structures used in the model. The Sears Tower, created by DSM using Somos® WaterShed XC resin, stands approximately 35 inches tall and, at a scale of 50 feet to 1 inch, is approximately 600 times smaller than the actual structure. The entire city model encompasses an area of more than 800 square feet.

“We are extremely pleased to have been part of this historical project,” said the Somos® Marketing Manager. “Not only does it showcase what stereolithography technology can achieve for the architectural community, but has allowed DSM to contribute to Chicago’s bid for the 2016 Games.”

The Chicago Model City Exhibition is on display at the Chicago Architecture Foundation building in downtown Chicago. In addition to the 3D model, the exhibition also includes photographs, maps, videos and digital visualizations.